<110> Rosen et al.

<120> 64 Human Secreted Proteins

<130> PZ011

<140> Unassigned
<141> 2001-02-06

<150> 60/180,909
<151> 2000-02-08

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<151> 2000-09-26

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<151> 1999-01-14

<150> 1998-07-15
<151> PCT/US98/14613

<150> 1997-07-16
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<150> 1997-08-18
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<150> 1997-08-18
<151> 60/055,683

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tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg 180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg 360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
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gactctagag gat 733

<210> 2
<211> 5
<212> PRT
<213> Homo sapiens

<220>
<221> Site
<222> (3)
<223> Xaa equals any of the twenty naturally ocurring L-amino acids

<400> 2

Trp Ser Xaa Trp Ser
1 5

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<211> 86
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cccgaaatat ctgccatctc aattag 86

<210> 4
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<212> DNA
<213> Homo sapiens

<400> 4
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<210> 5
<211> 271
<212> DNA
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gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat 180
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ttttggaggc ctaggctttt gcaaaaagct t 271

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<211> 31
<212> DNA
<213> Homo sapiens

<400> 7
gcgaagcttc gcgactcccc ggatccgcct c 31

<210> 8
<211> 12
<212> DNA
<213> Homo sapiens

<400> 8
ggggactttc cc 12

<210> 9
<211> 73
<212> DNA
<213> Homo sapiens

<400> 9
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ccatctcaat tag 73

<210> 10
<211> 256
<212> DNA
<213> Homo sapiens

<400> 10
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caattagtca gcaaccatag tcccgccccт aactccgccc atcccgcccc taactccgcc 120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggctttttтg gaggcctagg 240
cttttgcaaa aagctt 256

<210> 11
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<212> DNA
<213> Homo sapiens

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<221> SITE
<222> (546)
<223> n equals a,t,g, or c

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agggtctttt cctgagtgca cctgggcctg ccgcccggcg atgccatggg gtcgtgcgct 120
gcttttctac ttgccgcgct ctcactgctc ggtgtactgg gagggtaccc tgggaggcgt 180
gcctttattc ttccgaaccg ccgctcactg agacagtggc tagaagtgtc tcttggacct 240
gtgagttagc cttaacctgt tatgccccca gagccctcag tggagcgccc gtactttgcc 300
ggcatgacgt ttgatttccc ggtgataatc cgacgagttt gacagattga ggtagtgagc 360
aaagttgccc gtcagttggt ggccacttga cttcgtgcgg accctggcct tgctcttgga 420
agagatagtg ttcttagggc tggtttcact gtctcttaag actgaarggt ggarctggga 480
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cggtanccaa ttcgccct 558

<210> 12
<211> 715
<212> DNA
<213> Homo sapiens

<400> 12
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aaaaatattt actgagtgtg gactctagac cagggcctgt gctaggatac aaagatgaat 120

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gaggcaccac ccttatcttc gagtagtata tgttttattt tattttattt ttttcccctg      180
ctgcctccct tgagtagtac atgttttagt aaggggaaca gacactaaag agtcctggta      240
atgatgagca aagtactgca tgagtaagta tctgggggggc aagtgtcccc actaggactc      300
ctgtcagatc tggaaaaggc ctgaggaatc tgatacatga cttaatgcag cgtatacttg      360
cagcctggaa aactaagtaa tgacaaaata gacattcttg tcagtgtgag ccattctctg      420
agtccmaggg gagtacataa ttcaaaccag aattggtcat tttggagttt gcactcttag      480
cagtatacag tggagtgaaa tttaagaatc aatttaattt cttttcagtt tttatgtaca      540
taaaacctgc ttactacaag agacccagtt tattattttg tgttggttaa cattcataag      600
tatatttcat cataataagg ctccgtgaaa ttagtcattt tatcatttgc caataaagac      660
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<211> 838
<212> DNA
<213> Homo sapiens

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tgtcctggtt ttgcttatag aatcaaatat gttctcattc tacctactgt tttcattcta      120
catagtgttt tccttcttta tagttttacg tcctcttcct aggaatgagt ctattaagaa      180
aataggtgtt atctttttagc tttggcattt gactttcagg ataatagagc tatctgctac      240
tgacagaaaa gctttgacaa gtgtttaata ctctgggatt accttcatct tacttttgca      300
atcattatgt gaacattgtc ttccgtccac atctayaggc tagtawgtaa caccgttgac      360
taaatccaaa ctttaggcta gggaaaaagg gtatactttc tgggtttcgg ttgtagatta      420
tgtttagatc taaycaaaac aggacagtgg tccaaacaga aaattgctat tttctgtatc      480
ttgtaaatct aggatttgag tttttaagat gaatttatgg ttccctttct gatatcattt      540
ctcatctgca gctcctaatg cctggtacct tgggtatgga gtgaggagag acaatggaca      600
gttttatata agaaatggaa gtaatgatac tatctttcct ggaatatttg caggccccag      660
aggagatgat gagcaaggac tgttggcctg tattacacac aacagggttg tagttactat      720
cccagcaagg aaagggtgta tctttcttct ttcatgcaaa ttatctatga tgacctaaca      780
gtttgattat agtgagtgga ctaaccacaa caataaaaaa aaaaaaaaaa aactcgaa        838


<210> 14
<211> 513
<212> DNA
<213> Homo sapiens

<400> 14
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atccagtgcc tttccttttt gcctttgtat tcatcatttt ggcaaattac tggaagatga      120
cggttctggc caaaaggctg gttttgtttt tgggtcacat tttcttgctt ctctgcgtta      180
gaatcttgga ttagatgatg gacatggtga agatctcagc aacctcattc actagaagat      240
catgtggatt ggaatcatac aatggggaac aaatggaaaa gagtactttt gaaatagtgc      300
tggagaccac tgtgaccaca gaatgtcaag acacgtgctg ccattactgt tactatttgg      360
aaaatacatt cttgtaaatg caaccttagg gggtttgagg gggaagtctg ttgggaaatg      420
aattgcaaga aaaatattac accctgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      480
aaaaaaaaaa aaaaaaaaaa aaaaaaact cga                                    513


<210> 15
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<212> DNA
<213> Homo sapiens

<220>
<221> SITE
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cccggcagcg gccgccgccg cggcactgct acgggacgag ccggagcgct tggccatggc 120
ggcccgatcc gcactggcgc tgctgctgct gctgccagtc ctgctcctgc cggtgcagag 180
ycgctcagag cccgagacca ccgcgcccac ccctaccca atcccgggtg gcaactcgtc 240
aktgagcagg cccctgccca gcatcgagct ccacgcctgc ggcccatacc ccaaaccagg 300
cctgctcatc ctgctggccc cgctggccct gtggcccatt ctcctgtagg gacgcccagc 360
cagccacctc taagtcgccg ctgggactgg cctgccccat tgagcaacag agacgcttga 420
cagccgcccg cctccattcc ttgactttcac ccagaaatgg gtccagaaaa ctgaatccca 480
ccagcactgg tttggagcaa ccggacaccg aggtttcacc tccagggrtt ccatggaaga 540
gcctcaatgg agatgccaca tcctnactga gttaaagatg ggctgaggaa cttgggtacc 600
cacaagtytg ccttgggrat caaaagaaaa tatttacctt tagtttggtt cattaaatgc 660
atgaagtcaa aatatgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaactc ga 712

<210> 16
<211> 652
<212> DNA
<213> Homo sapiens

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cgcacagcct ggctttgggc ttccctgact gcaccaccca catcasctgc ctctagccct 120
taamatacaa aacttccccc agtcactggc cgccaggctg agttgggggа tgtgttacat 180
ccctgggtcc actgggggggc agtgttggcc atggtgttgg tgctggctct gccgagaggc 240
gttggagtgg ctgtgtgggg cggtgagcgc cggcccagcc tgatggaacc cactgtacca 300
ggcccaggcc tcagcctctg agaaggactt ccctgtgtca ctcactcata catgtcctca 360
ggacgtgaag acatttcagc agaccaaagt ttccttcgaa tttccttcga atcgtccaga 420
tacttggaga catctcctcc tcacctgtgg ggtgctgggg cagtcctagg cgtgggggca 480
gatgggtgga cagctgctgc tgccctgctg ggggtgggca gcccttggag cacacagtgg 540
tgaagacatt cctgaatatg tctcaggctg tagaaatctt attttgtgga aagattttag 600
agaatcatca aaataaactt ttaccaaata aaaaaaaaaa aaaaaactc ga 652

<210> 17
<211> 742
<212> DNA
<213> Homo sapiens

<400> 17
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ttgagctgat ttgagctttc ttcttttctc tgtagttggc ggaatcagct cagttacatt 120
ttttactaag ttacccacat tctgacactc cttgacagtk ttaagatctt cttctaacac 180
acttgaatag aatggatact ggaatctatt ttgacagctg ttgaaaatct attctgttgt 240
tacaggaggt taaggaggtt atttgtaaca ctgggattat ttaatgaacc ttttgaaaag 300
gtgtgcagac tgttcaggca aatagtattt tttagaatta aatgattttg gttttcacag 360
ttaaattatc aaatgtaatg cttttaagaa ttatacacct agtaatattt ttcattaatt 420
tctccaccag tgtagtaata gtacattaca atgttctcaa ttaccggtgc cttctaaaat 480
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tcyttaaaar tgaccttkgr gcaattycat aaagaataaa tatttctagt tttttgttgc 600
tgaactgcta aaagatggtt ctatacatgt aacaggtggc tttagttggg ttgctttcac 660
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aaaaaaaaaa aaaagggcgg cc 742

<210> 18
<211> 1219
<212> DNA
<213> Homo sapiens

<400> 18
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ctgtttgaga atgcttctta actaatacta gtacaatatc ttcaataatg tatgtacctt 120
atagaaaatc ttgaacagta caagattttc ataattaagg catgcaaaac tgcttgggct 180
ctttgattcc aggtgtcctc ttctcccttc tgcttttgcc atctatgttc aatataattc 240
taacccagtc taagtatgga gaaaattcct accctgcctg cttttatagc tcatcaaatt 300
tccctgtatc agctatcact tttctggtag gtgtagtctg atttctgtct gtcatgcctt 360
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tctaatatat aaagcctcca gtggtttccc atatcactct gtaaaatgcc ccttgccagc 480
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ttgccatcct catgtgggga tgtttctgtc tcagagatag tctttattca ggtcccactc 600
tgcagtcctc tccagagggg ctgctttcac caccccttct aagtaagcct ctctaaacac 660
ctctatcata ttctatccct tagccagcac taatttttтc ataatgctta ccactaactg 720
aaatttactt tatcatttaa tctcttcctc attagaatgt aagctcgtaa gggaggggca 780
gctctgtagt ttattcatta ttgtatgtcc ctcacctaat cctatgagtg tctggcccat 840
attagggtat gtaataaata ttacttgagg aatgaatgaa tttaacatac taccaattct 900
ctgagtgact ctttttaaag ccttcatcat cattcacact ttcttgtctt tcatatgggc 960
atgtccaatc acccttccat gaatatctgt acctgttaca aagagaggac taggttcctg 1020
gagttcatag atgtaaacaa catcctaggg ktagcaaact ggtgggccct gagccaaatc 1080
ctggcctgca catgtatttt gtttgakttg tacaatgttt gttataaatg aactggctga 1140
taatattttt taattggaaa tgtttacatt aaaaacctar acttctagct gctcttaaaa 1200
aataaaaata cggctgggc 1219

<210> 19
<211> 874
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (461)
<223> n equals a,t,g, or c

<400> 19
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cagagttggg atttgaagtc gagttagacc ccagtgatca cagtcttgac gattaaattc 120
ttccagcttt cattttтcac tgagataatg gtagtgatag tactgacctc taatgtgtgc 180
atttgtgggt atgtggtcca ttcagcttta atccccagaa gacaaggctt attccttttc 240
ttatttttgg tcatgtttta ttttтccatt gcttttaaca ggattaccaa aggcacactc 300
agtagtcagt aaacacattt ctaggaaagg tgttgtgtca tcatgccaca tattcatact 360
ttcctgggtt ggaaaatага tcatcagtaa aaacatacag gaaaaatgaa tcttgccaat 420
gcaattgtta acctacaacc ataatatacc ttaagtatat ntttgcacat aagtataaca 480
tgcgatttaa aacaataaac cagattgaga tctaaggagc attttgtaag taattactaa 540
tgtttatttt agagagatca cacaacttca aataaaaact gacatagatt gaacaccttg 600
agaataaact ttagtgccaa atggaaaata atttttтaca agtaaatttg aagaacaatg 660
tgaactttct ataattatat acagraaata tactgatttg ccaaaatgag taattttgat 720
atattaatat ttcacttata agaatgcata ccacctgatc caggatggga tccaggaaca 780
gaaaaagaac attagktaaa aatgacagaa atctgaatat agtatagagt agctaaaaac 840
aaaccaaaaa aaaaaaaaaa aaaaagggc ggcc 874

<210> 20

<211> 464
<212> DNA
<213> Homo sapiens

<220>
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gaaagctggc cagaccctcc tgkatgcact cccwgcccck tktatcagaa acacaggcaa 120
ggaaattgga actgccaccc agcccagcat ggtggctcaa ttggttggtt gcgttgtcag 180
ttgtctcttc gttttgttaa ggtttttaat aagtacgttt ggcataatgt cttttaatgg 240
gtttgtaata tttgtaacgg ttttagcagc ctataacttt tcagctggtg cttttactta 300
gggaaaaaaa caatttgtaa atacagaaca ttgtttaaaa gacataacca tagaacatag 360
cttcctgttt gtggatttg tttcctatat attcaaagta aaatgactta caggaaaaaa 420
ataaaaaaaa aaaaaaaaaa aaaaaatcg gggggggggc ccgg 464

<210> 21
<211> 637
<212> DNA
<213> Homo sapiens

<400> 21
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ccgctggccm tgctgtttcta catgggagca agacagctgc taggtgaagg ggaatgacca 120
ggcagccaca gggaggacat gtggcctcag gaagcctggg tgtgtatcct ggttctgcta 180
ggaacacgtg tggggctttg tgtgggtgac tctctggctc cccaagcctc cctttcctac 240
tgttatatcc ttaaagtgcc tctgaggcca aagcctttgt ggcaattgtc aaatgagtcc 300
atatgcagtg agtaccgtgt tgagggagga caaggtcacc aagagctgag aatgtttctc 360
cgactgatga gacctagata ttgggtacat ggaggtcccc ggtccctttg tgattcctgc 420
agcctgttgc ctccttgcct ggaccccgcc tcagctcaga aagccaattc cctagattcc 480
aaaggccttc ccagaccaat tagcatgtcc tgcagctgtc agctccctgt gcctagcctg 540
gacctcagct catgtctagc acccagtctc ccaaccccac acatattcac aaataaaaga 600
aaataacaaa tgaaaaaaaa aaaaaaaaaa aaaaaat 637

<210> 22
<211> 752
<212> DNA
<213> Homo sapiens

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atcccatttc acaaggatgg catgttgcca acattgtctt tctaaagaat atctctgatc 180
acatccttgt tctattaaaa acctttgaa agctccctct tacctttaga agaaattgga 240
acttcatgat tcctcatggt ctggctccag cactgagtct ggaatgctag tgtgagatga 300
ggccttagaa gtcatccagc tgaactcctg gaatttttat agatgaataa atgtagcatc 360
cagacatttt tcytgttgca cccctgtamg ccatgtcctc ttccagactc ctggataaga 420
ctgrcagaca tcaccattct cttaaaccag aactacactt gccttcatcc atttgatcac 480
ctggttccag gtaactcatg agctttgtag cttcccttct ctcagacctt ccaaggaaga 540
caatggcata attttcccca tatgctctaa ttagcaacct ttccctgccc ttctgtgggt 600
gggcagggcc ggacacagtg ggtcacacct gcaacctgta atcccagcac tttgggaggc 660
tgaggtgggc agattgcctg agctcaggag ttcaagacag tctgggtaac atggcaaaat 720
cctgtctcaa aaaaaaaaaa aaaaaactc ga 752

<210> 23
<211> 492
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (486)
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aaggacccag aagtagggtt ttggcctagg taacggggca gagatgtggt tcgagattct 120
ccccggactc tccgtcatgg gcgtgtgctt gttgattcca ggactggcta ctgcgtacat 180
ccacaggttc actaacgggg gcaaggaaaa aagggttgct cattttgggt atcactggag 240
tctgatggaa agagataggc gcatctctgg agttgatcgt tactatgtgt caaagggttt 300
ggagaacatt gattaaggaa gcattttcct gattgatgaa aaaaataact cagttatggc 360
catctacccc tgctagaagg ttacagtgta ttatgtagca tgcaatgtgt tatgtagtgc 420
ttaataaaaa taaaatgaaa aaaawrmaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
aaaaanaaaa aa 492

<210> 24
<211> 532
<212> DNA
<213> Homo sapiens

<400> 24
actcatataa gaaagcagta cgccgcagta ccggtccgaa ttccgggtcg acccacgcgt 60
ccgcccacgc gtccgcacct cccttggctg tggggagggg cttccatgcc ctgtgtggct 120
ctcgggtggg ctgtcgcacc acactgctct tcctttctct tcacgaatca cgcaagcctc 180
ctagtcagtt ctgatgagat aacctggata tcttggttgc cggtgaagga tttacatgct 240
tattatggtt tttttgttgt tgttgttgtt tggttttttt tttgatggga gcctcagatc 300
gccgctgttg ctaatcatcc atcttggccc tgcccccaca tttctgcaaa tttaaatatg 360
agatttgtcc ccttaggtgc acagtccaga ccccatccag tccagctcct tttaaagcca 420
catggaaagt cagctgagaa tggtttggga gcccaggtgc gctgtcttcc gccctgccct 480
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<210> 25
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<220>
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<220>
<221> SITE
<222> (914)
<223> n equals a,t,g, or c

<220>
<221> SITE

<222> (920)
<223> n equals a,t,g, or c

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aatctctact tagtttaact tattggatca aattatcttc agcatgtata tctggggaaa 180
aaaggtccga attttcacat ttatatttaa acttcaattt tttatattta aacttcaatt 240
ttttagcaac agctgaatag ctttgcggag gagtttaata gttacacatt catgctaata 300
tacatttcct ttaaacatcc acaaattctt aaaaagrttg aatcagtaaa tttcatttca 360
gctaaaaatg gagtctaata tattgtttca aaagatacat ttttacccac cataaatgtt 420
acaatatctg aatatgcttt gtcaaactat ccctttatgc aatcgtcttc atattgtttt 480
tatgattcta atcaagctgt atgtagagac tgaatgtgaa gtcaagtctg agcacaaaaa 540
gataatgcac gatgagattg cctaccattt tataggatat ttactatgta tttatacgtt 600
aagacctcta tgaatgaatg tatcagagaa tgtctttgta actaactgtt taattcaatc 660
tgtaataaaa atctaactaa ctaactcatt tatttctatt aaaaaggtat tgtcctttag 720
gcggggaatg ggaatccttg ctgcactgtt gcagtcattc tgaaaggacc tttccctgta 780
cttacctttc aacatgcttc aatcttatca acgctacatt ttgtattttt caaacaagta 840
taaattctgc aataaagaga tgtagttttt ttttaaacaa aaaaaaaaaa aaaaaaaaaa 900
aaaaaanggg gggnnccccn 920

<210> 26
<211> 917
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (434)
<223> n equals a,t,g, or c

<400> 26
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cagaatgtca tatagttgga atcatacaat tgtgcagact ttttagattg ccttctttca 180
cttagtaaca tttaagtttc ctccacccct tttcatggct tgatagttca tttctttaa 240
ttgctcaata ataaatattc cattatctag atagaacggt ttatctacct agtgaaggac 300
atctcaattg cctccaagtt taggcaaata taaacaaagc tgctatcagg atttttcaca 360
gaggaaaaga cagtgggatc caaaactgaa tggtctatca ataaatgacg catggtacat 420
ctacacccat granccattg tgcatccatg agaaaaatcc agatgtagga aggtatgtat 480
aattttgcag aaaagagtat gtaactggaa acaccaarga aaaaaggaaa tggatctata 540
tatttaggtg gagatattta tgtggctgca gaagaaatat attattattc atactagata 600
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gaggaagagg aagaaaaaaa aactgcacta agaaaaatct tttaaaagta tgtgatcaca 720
gccaggtgca gtggctgaca aatgtaatcc cagctacttg ggaggctgag gcaggagaat 780
cgcttgaacc caggaggctg aagttgcagt gagctgagat catgccattg cactccagcc 840
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<210> 27
<211> 662
<212> DNA
<213> Homo sapiens

<400> 27
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cccacccagc ccctctaccc cgcgcatcag ggtagcaggc gagctagcac tgtggcacca      480
ggagtggagc tggcccctgg cgggcccacg ctggagaggc atcgccatct ctgctgcccc      540
cctgtggcgt catcatatca acctgccagt ccccctcacc tggtgttaat ctcccagagg      600
atggggactg rttctgcata ttctttgcta aacaaagacg ctagtttggc tgtggctctc      660
ga                                                                     662
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<210> 28
<211> 699
<212> DNA
<213> Homo sapiens

<400> 28

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tttcctaagc acactggacc atagaggaag accaaaggaa tgtacagttg cctgctcctt      180
cctgacttgc tgtatttgac tctgtcccca ctggtggtgg caatgctatt aaccccacac      240
tttaacgtgg caaatcccca gaatctgttg gctggtctct ggctagagaa tgagcacagt      300
ttcaccctta tggctccaga aagagcaaga acacaccact gccagccaga agagagaaaa      360
gtcttgttct gtctctttcc cattgtccca aatagccaag cacaggttca accaccccaa      420
atgccaccct tctgctgtgc agcagccaag gaaaagaccc aggaggagca gctccaagaa      480
cctctgggca gtcagtgccc agatacttgc cccaattctt tgtgtccaag ccacactcag      540
ctgacaaaag ccaacacttt gtctctcttt ttttttttct cttttttttt gagcagagtt      600
tcactcttgt cacccaggct ggagtgcaat ggcaggatct tggctcattg caacctccac      660
ctcccgggtt caagcaattc tcctgtctca gcctctcga                             699
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<210> 29
<211> 1637
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (726)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (727)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (728)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (899)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (901)
<223> n equals a,t,g, or c

<400> 29
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tcgtcacttc tttgattggg gctttgatcc ctgaaccaga agtgaaaatt gaagttctcc 240
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aagaaggaaa aggtaaaatt cccccagaaa gtacactgat atttaatatt gatctcctgg 540
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gaggcggagg ttgcggtaag ccgagatcac ctccagcctg gacactctgt ctcgaaaaaa 1620
aaaaaaaaaa aactcga 1637

<210> 30
<211> 2142
<212> DNA
<213> Homo sapiens

<400> 30
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<210> 31
<211> 1564
<212> DNA
<213> Homo sapiens

<400> 31
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aaaaaaaaaa aaaaaaaaaa aaaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg 1560
gggg 1564

<210> 32

<211> 1631
<212> DNA
<213> Homo sapiens

<400> 32
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ctagctgcct caagtgaggg gccctttgca tagctctcct tccccctcac tgaagctggg 180
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<210> 33
<211> 978
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (27)
<223> n equals a,t,g, or c

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attggagatt cagaggggag aaagtcactt atcacattag tgtaattttc tgatggtagg 180
attatggaga gttttaggtt ttccctttttt ttccccaact tctctcccct cagtatttta 240
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tcactcaaat ggtctgtgaa gcttgcaaaa acaggaatgc ttaccctcct gggtcctgaa 780
tttttggttc tcttggactc tttgaaattc ttctttctca gaaaggagcc ctctttctat 840
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<210> 34
<211> 898
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (402)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (452)
<223> n equals a,t,g, or c

<400> 34
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tagttttatc tgggttcttt gaagaacggg ggacacctca ctggcttatg ttgaatttct 180
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taaaactttg aataatttct ccctgaagaa atgttgaact tttctgcaag ctgttggaat 360
kggagcgcgt gttgaaaggc ytgaakggga ccgtactgta cngcctawtt cttttaaaaa 420
aaattawgat ttcyattttt watycattta cngatgactg aatakgtyca ggccagaaaa 480
tatcccctta tttcaaaatg cagcaatcta taaacaaaat acttgccatt tttctaaatg 540
acacctttt ctataatttg tatagaaaat taagtgcaag ggccaggcac cgtgtaacgc 600
ctgtaatccc agcactttgg gaggccaagg cgggtggatc gcctgaggtc agtagttcaa 660
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ggtgtggtgg cagacgcctg taatcccagc tacttgggag gctgaggcat gagaatcact 780
tgaacccagg aggcagaggt ggcagtgagc tcagatggcg ccattgcact ccagcctggg 840
taacaagagt gaaaactgaa gctgtctcaa aaaaaaaaaa aaaaaaaaaa aactcgga 898

<210> 35
<211> 754
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (311)
<223> n equals a,t,g, or c

<400> 35
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gcttgtccat aatctttctt ttaactcctg tgcttctctc tcatcctttg cagagccttc 120

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cactgtaagt atagaacatg ctgggaaatc caaattaaaa atgacagttg gcacaaagct      300
gacttctggg nagggaccaa ggaaaagtag ccagagtggc aggatagctg cttccatcac      360
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gcaggcatca gtacttctgg ttctgatggc ccggggattt ctaagtagta gtgagtctca      480
gcattatttg ttatacagtc tactgctaga tgaacaaggc taagtctaca gagaaggtaa      540
attatagaaa ttaggccccg tctctgctaa gaatacaaaa aattagccgg gcgcggtggt      600
ggggtcctgt ggtcccagct actcgggagg tgacgcagga gaatggcgtg aacccgggag      660
gcggagcttg cggtgggccg agatagcgcc actgcagtct ggcctgggcg aaagagcgag      720
actccgtctt aaaaaaaaaa aaaaaaact cgta                                   754
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Electronic Acknowledgement Receipt
EFS-Web 2.2.4

<210> 36
<211> 699
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (483)
<223> n equals a,t,g, or c

<400> 36

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cctccttccc ggactcagga acagcaagac tgttactatg ccattgtccc ctgccctcct      180
tcccaccctc ctttttttte cctctcccac tcccttcttt caccccttte tttctgtttt      240
atgctgcttc aagtattaat tttaaaattg ttctacaaga atgcgattta tcagaaggat      300
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aaaatttgtc ccccattcct ttttgcctgt ggaacttatc cttattcttc aagagactcc      420
tamtcctaat agcactttga atttaacctc cctggtagtt cttctcagcc aaatttcacc      480
ttnctgaaaa caggattctc tgttctccat gtctggctaa tttttgtatt ttttgtggag      540
acaaagtctc actatgttgc ccaggcaggt ctcaaacacc tggccttaag ccatcctccc      600
accttggcct cccaagtgct gggattataa gcatgtgcca ctggacccag ccagagaccc      660
tgtctcttta aaaaaaaaaa aaaaaaaaaa aaactcgta                              699
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<210> 37
<211> 971
<212> DNA
<213> Homo sapiens

<400> 37

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gccaccgagc cgcagttcct gggtcgcgcg gcagctgtga gcgccgaggg caaggcggtg       60
cagaccgcca tcctgggcgg cgccatgagc gtggtgtcgg cctgcgtgct cctgacccag      120
tgcctcaggg atctggcgca accccgacgg ggcgccaaga tgtcggacca cagggagagg      180
ctgaggaact cggcctgcgc cgtgtctgaa ggctgcaccc tgctatctca ggcttaagg       240
gagaggtctt cgcccaggac tttaccgcca gtgaattcca attctgtgaa ttagcacccc      300
acccccatac cccttcttcc acccccagac taaaggaaga tacttactct ctgcccctct      360
ccatttatac caaagaaatc ataggtgaaa ccccctaccc tccccaacgt taaatgctcg      420
agaggaatct tccacaaggc agggccatgc acgcaacctg cacacgcact tggagggccc      480
aggtgtctct ccaccagccc ccatgcagta gggactggaa gatatgtcat ctgctggttg      540
tgttatcact cccacccccct accccagccc gtsttccgga atttctcaac taaatttsat      600
tattgggcag gaaggaggtc atgggttcat ttcatttttg ttttttgtgt ttttaattaa      660
aagaaaggtt acctcagttt tcactcctta gacatggatg tagctacctt tttttgtatg      720
tctttttttt tttaagcaat cgtgttgaat taggagtata cttggtgtgg aaagagtatg      780
aatttgccat gtgatttgca aatgggggga agctactgtg agcgtgtgtt tttttaattt      840
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acactataga gtgatttttt tttcccccaa cgtcaagttt ttaccttgca tgtactggag      900
tatttatttc atctattaaa atgttatgtt tctcagaaaa aaaaaaaaaa aaaaaaaaaa      960
aaaaaactcg a                                                          971


<210> 38
<211> 872
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<400> 38
tngcagttct ccacaccgaa gaggacggtg ggcgccaaca gacaggcgat taatgcggct       60
cttacccagg caaccaggac tacagtatac attgtggaca ttcaggacat agattctgca      120
gctcgggccc gacctcactc ctacctcgat gcctactttg tcttccccaa tgggtcagcc      180
ctgaccyttg atgagctgag tgtgatgatc cggaatgatc aggactcgct gatgcagctg      240
ctgcagctgg ggctggtggt gctgggctcc caggagagcc aggagtcaga cctgtcgaaa      300
cagctcatca gtgtcatcat aggattggga gtggctttgc tgctggtcct tgtgatcatg      360
accatggcct tcgtgtgtgt gcggaagagc tacaaccgga agcttcaagc tatgaaggct      420
gccaaggagg ccaggaagac agcagcaggg gtgatgccct cagcccctgc catcccaggg      480
actaacatgt acaacactga gcgagccaac cccatgctga acctccccaa caaagacctg      540
ggcttggagt acctctctcc ctccaatgac ytggactctg tcagcgtcaa ctccctggac      600
gacaactctg tggatgtgga caagaacagt caggaaatca aggagcacag gccaccacac      660
acaccaccag agccagatcc agagcccctg agcgtggtcc tgttaggacg gcaggcaggc      720
gcaagtggac agctggaggg gccatcctac accaacgctg gcctggacac cacggacctg      780
tgacaggggc ccccactctt ctggacccct tgaagaggcc ctaccacacc ctaactgcac      840
ctgtctccct ggagatgaaa atatatgacg ct                                    872


<210> 39
<211> 608
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (16)
<223> n equals a,t,g, or c

<400> 39
ccatacgcan accgcntctc cccgcgcgtt ggccgattct tatggcagct ggcacgacag       60
gtttcccgat ggaaagcggg cagtgagcgc aacgcaatta atgtgagtta gctcactcat      120
taggcacccc ggctttacac tttatgcttc cggctcgtat gttgtgtgga attgtgagcg      180
gataacaatt tcacacagga aacagctatg accatgattt acgccaagct cgaaattaac      240
cctcactaaa gggaacaaaa gctggagctc cacgcggtgg cggccgctct agaactagtg      300
gatcccccgg gctgcaggaa ttcggcacga gtttgggtgg agtttccaag gtgaaagttt      360
ctgaattggt caatcagtga cgcctttgta aagatggctc atgtggtggt cgctcgcaat      420
gaatgcctga taagggcttt tctgtttctt ttgcactgtg taagtttgct cccatcgcct      480
ggggaagtta atatcagaca cacacttttt acggtagaag agaggttgac tactccaagg      540
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gcactgaaac tctcactgag cctttattgtt tctctacacg cgamttgcag aaagcaggag 600
tgctcgta 608

<210> 40
<211> 855
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (850)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (851)
<223> n equals a,t,g, or c

<400> 40
ctgtaatagc acacaactca gaactcttca gcatttgtgt gattccttac ctctggctga 60
taaaactcta atgggttgtg gcttactttg tttccatttt ctttggcttt gtgcaatttt 120
tgtgtaactt tacttgtacc tatattttct gtttacagtt ctttttaagg ggaggggtag 180
ggttctaaga tcttgttgtt tattgtagat aaaaatttttt tcgtgttgta gaaaagcatg 240
ggttatgcgt ttgactgaaa aagacactgt attatttacc aaaggggtat tgtttttgca 300
tttgtttata aatgcattat tttggtactg taaatttgga cataatttct gagtttatta 360
ctactggcat tttctttttc ccttttttt ttttttaacc gtaagtgcac gatgcaggtg 420
cataggcccc agaccaaact agaccaccag catgttcatg tccagacctc ggcagtggcg 480
tgcactgctt gtgcacctca gttcctccag tgttggtttg tttgtttttt aattcagcat 540
cctgctggtt ttactttcca agcaagatct gttgcgactc ccaaatgcgt tttaatgagc 600
tcatccttat ttgcctttct tcttacgtat tttgtgtatt agattgtgca ggagatattc 660
tagaaggcat taatggtttg cattcaaaac gatgtggttt gtccaagtta tttttctgtct 720
ttattactga gacggattaa tctccttatt tttttcttga tgatttgaag ttgtaacagt 780
tgtccagcta ttgcttaata aaattttgca gatcaaaaaa aaaaaaaaaa amctcgggggg 840
gggccccggn nccca 855

<210> 41
<211> 1042
<212> DNA
<213> Homo sapiens

<400> 41
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ggaacctctt aatctcagca tccggagctc caggaaggga aaatttcaag tcagatagaa 120
ttctatatat accatttctt tggaaccttc agccctcaag attccaacat catgacctca 180
gtttcaacac agttgtcctt agtcctcatg tcactgcttt tggtgctgcc tgttgtggaa 240
gcagtagaag ccggtgatgc aatcgccctt ttgttaggtg tggttctcag cattacaggc 300
atttgtgcct gcttgggggt atatgcacga aaaagaaatg gacagatgtg actttgaaag 360
gcctactgag tcaaacctca ccctgaaaac ctttgcgctt tagaggctaa acctgagmtt 420
tggtgtgtga aaggttccaa gaatcagtaa ataagggagt ttcacatttt tcattgtttc 480
catgaaatgg caacaaacat acatttataa attgaaaaaa aaatgttttc tttacaacaa 540
ataatgcaca gaaaaatgca gcctataatt tgctagttag gtagtcaaag aagtaagatg 600
gctgaaattt acataagtaa tatttcataa tcttagaatt ctctcaaagc atgtgaaata 660
ggaagaagga agttcttgcc cagaatctta ggaaatcacc actgttcggt tataatcact 720
gcctcctgaa tcgttgagga gtcttttaaa ttagattttt gttttgttgt ctcccaagtt 780
aatattatat ttagatatca gagagtcagg yaaaaaggaa aacttttatc tctagggaaa 840
aaacatttag aaaaatgtat tcagtgtatc taatactgaa atgcggaaaa aaatttaatg 900

ttaaaaaaaa actatagaca ttgacatgga aaagagattt aatgttttga aaaaaaactt 960
tatattaact gagtaacatc ctcctgatga gaagtactat attaaatata aacccattat 1020
gttataagtt aaaaaaaaaa tt 1042

<210> 42
<211> 702
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (614)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (673)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (677)
<223> n equals a,t,g, or c

<400> 42
gggacaatga actccttctg gtctaagtta ttggtgctgc ccctgctggc tccgctgtcc 60
atggcccgag cctctgcctg tcagagatgg tagagccacc aggacatgga gtcattgctg 120
acacagggaa acatgagatg tcttaggttt ggtgtatgtg aaacatgcat gagaaataga 180
ggccaaaagt tccactgtgg agcgcagaca gaatggtctg aatgctcttg cagttactac 240
gtcagtagtt tgtcatctaa tatatattat acatctataa cctatgtatt taccttattg 300
tgataatact gttttgtttt gttttttttc taattttgct ttgtgcaaag ccaaatccct 360
ttcagcagca ttgagctaaa aaaaaaaaaa agtgcatgtt tagggctggg cacggtggct 420
catgcctata atctcagtac ttcgggaggc cgaggcaggc ggatcacaag gtcaggagtt 480
cgagaccagc ctggccaata tggtgaaatc acgtntctac taaaaataca aaaattagct 540
gggcatggtg gtgggtgcct atagtcccag ctatgcggga ggctgaggca ggaaaaaccg 600
cttgaaccct ggangcggaa attcccagtt gagccaagat cgcgccactg cactcccagc 660
ctggttgaca gancganact cttgtctcca acaaccagca ac 702

<210> 43
<211> 642
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (593)
<223> n equals a,t,g, or c

<400> 43
aattcggcac gagcggcggg gtcgactgac ggtaacgggg cagagaggct gttcgcagag 60
ctgcggaaga tgaatgccag aggacttgga tctgagctaa aggacagtat tccagttact 120

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gaactttcag caagtggacc ttttgaaagt catgatcttc ttcggaaagg tttttcttgt      180
gtgaaaaatg aacttttgcc tagtcatccc cttgaattat cagaaaaaaa tttccagctc      240
aaccaagata aaatgaattt ttccacactg agaaacattc agggtctatt tgctccgcta      300
aaattacaga tggaattcaa ggcagtgcag caggttcagc gtcttccatt tctttcaagc      360
tcaaatcttt cactggatgt tttgaggggt aatgatgaga ctattggatt tgaggatatt      420
cttaatgatc catcacaaag cgaagtcatg ggagagccac acttgatggt ggaatataaa      480
cttggtttac tgtaatagtg tgctgttcat ggaaaccgag ggctgcatct tgtttatagt      540
catctttgta ctgtaatttg atgtacacaa cattaaaagt actgacacct ganaaaaaaa      600
aaaaaaaaaa aaaaaaaaaa aaagcggccg ccgaattaag cc                         642


<210> 44
<211> 1219
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (25)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<400> 44
aattcccggg tcgacccacg cgtcnnctaa aatccccaaa ctgacaggta aatgtagccc       60
tcagagctca gcccaaggca gaatctaaat cacactattt tcgagatcat gtataaaaag      120
aaaaaaaaga agtcatgctg tgtggccaat tataatttct ttcaaagact ttgtcacaaa      180
actgtctata ttagacattt tggagggacc aggaaatgta agacaccaaa tcctccakct      240
cttcagtgtg cctgatgtca cctcatgatt tgctgttact tttttaactc ctgcgccaag      300
gacagtgggt tctgtgtcca cctttgtgct ttgcgaggcc gagcccaggc atctgctcgc      360
ctgccacggc tgaccagaga aggtgcttca ggagctctgc cttagacgac gtgttacagt      420
atgaacacac agcagaggca ccctcgtatg ttttgaaagt tgccttctga aagggcacag      480
ttttaaggaa aagaaaaaga atgtaaaact atactgaccc gttttcagtt ttaaagggtc      540
gtgagaaact ggctggtcca atgggattta cagcaacatt ttccattgct gaagtgaggt      600
agcagctctc ttctgtcagc tgaatgttaa ggatggggaa aaagaatgcc tttaagtttg      660
ctcttaatcg tatggaagct tgagctatgt gttggaagtg ccctggtttt aatccataca      720
caaagacggt acataatcct acaggtttaa atgtacataa aaatatagtt tggaattctt      780
tgctctactg tttacattgc agattgctat aatttcaagg agtgagatta taaataaaat      840
gatgcacttt aggatgtttc ctatttttga aatctgaaca tgaatcattc acatgaccaa      900
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ctatgatatt aatcagatca ttaccagtta gcttttaaag cacatttgtt taagactatg     1020
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ccccatttga atttgtatga ttcaataaaa gaaaacacca agtaagttat ataaaataaa     1200
aaaaaaaaaa aaaactcga                                                  1219


<210> 45
<211> 437
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (422)
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (423)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (427)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (437)
<223> n equals a,t,g, or c

<400> 45
gaattcggca cgagggcggc accagggagc ctgggcgccc ggggctccgc cgcgacccca 60
tcgggtagac cacagaagct ccgggaccct tccggcacct ctggacagcc caggatgctg 120
ttggccaccc tcctcctcct cctccttgga ggcgctctgg cccatccaga ccggattatt 180
tttccaaatc atgcttgtga ggaccccca gcagtgctct tagaagtgca gggcacctta 240
cagaggcccc tggtccggga cagccgcacc tcccctgcca actgcacctg gctcacaaaa 300
agagtgcaac aaatgcttct attccatagc tacggcattg ctcagtaagt tgaggtcaaa 360
aataaaggaa tcatacatct caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420
annaaannaaa aaaaaan 437

<210> 46
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (305)
<223> n equals a,t,g, or c

<400> 46
gaattcggca cgaggaccct atcttacaaa aaagaagaag aagaagaaaa ccatgacagg 60
tgtctttaag ctgcccttgc tgttctgggt tcatgaagca tctgtgggag gttgcccata 120
tgtaaaatta gttgagtttg aagaaatgtt aacgttatat ggtattcttt taattttgtt 180
ttaaaaataa ttttttctcat tcaaatcctg aattagaagt tgtttggtat aaatattgaa 240
aattgttgag gggagaattt attcaaagtt taatcatttg ctttatctat gttatactta 300
gctantagtt actggaagtg tcaagtttta tttttagatc ttaactagag tctaaagtaa 360
ttactaaaag ctagttttca aataatatgt aagagtaaag tcctgagtta aaagatttag 420
catactgaat taacttagtt gactgatgct gtacttacat gggcctccta tttcttgtgg 480
ccaagatagc atcaacagaa aaaaaamaaa aaaaaactcg agggggggcc cgg 533

<210> 47
<211> 1849
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (222)

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1300)
<223> n equals a,t,g, or c

<400> 47
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gtgacctcca tctgcttgct gtcataaccc gacacggact tatttttgtc attagcaagg 120
gggaaaaggc caaaggacaa gggcctcttc tcccattggt tttcctgtgg gcagaagggc 180
tgaggaagat ggcccagccc gtgggggctg ctgggtcacc ancagyyggt agggtgcaat 240
ctggtgtgtg ttccagcagt gagacggtgt tattgtgaag gtggcattca tctgcggacc 300
aaaacccagc catcggggaa gggtcagggc ttctgtggaa cttggaacgt gccaggacca 360
cctgcaaaag ccagggtgcg ttgatcattc tcagatcatt gattggcctc cacttgggta 420
tgtgaattat tcatgtccca gaagaccaaa aagtgctctg gttctgagat gagtatttta 480
ttcgtgttct gtttccgaaa cacttagcaa agaaggtcac agtgatgtgg agtcgccgca 540
cccatctttg aagatagcca gtgtccctgg atgaggtgat gatttcccgt cccaaggact 600
ctgtgaagtt tagagtacag tttgttgggg tccaaaagac accatctcta ccccacccaa 660
ataaaaatgc actcatctct gtagaacatc tgctgtcaaa ggccagcctg tcgttagggc 720
atggcttatg cttgacaaac cagtaacaac tgtgggatgg cgatggtggg atgtgtcgca 780
agcaattcac tagacaatct tcacatgaat gtcggtagcc agggtctctc ccgagggatg 840
gctttagtct tgatgaatgt gaaccatgtc ggaattgtta ggtagaaacc tgggctggga 900
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gcgcgagatg cagctagcac ccttcatatc catcccctgt ctcagcggga caacaccatg 1020
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ttgaaagcag acatagcatg acagaccttc ctagagtgtt tggtcgggtt cacagtgacc 1260
gagagtcagg tccagcacac acctgggaaa gggatgctgn cccaaggggg accaaaaggg 1320
ccggacgtta cagggtgaaa ccctctgacc cctcgcgaca ccgtaggact tgacttttgt 1380
ttagtctttc taagaaatag atcatggagc caagtgaagt gcactttgtc aaatgtaagg 1440
gtctgctttg ttcttgttgc tttttctgttt tttaaccttt tgttccgcca tttaaaaaaa 1500
gaaaaaaaaa aagcttatgt ttcttgtcaa atgcagaaat gttccttccg ccactcactg 1560
aagttttgca ttctggcttg tgcagttttt attgtctgtg tcagacgtac agccagacat 1620
gttctctatt ggcatttttc cgattctgtt cagatgacag cgaccgcctt ttcattcccc 1680
ccgccacctg tactcaccct cacgctcttt gaagaaaaaa aaaaaaatca ccttgtgtgt 1740
tgtagctcat ttgtttcaag agagaatcaa cagatcatat tcagtgtctt gaataaattg 1800
ctctattttg atattagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa 1849

<210> 48
<211> 926
<212> DNA
<213> Homo sapiens

<400> 48
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atgggagcat cttggctgag aggaaagaac ccctccgatg cctaataaag ttctctagcc 120
cacatcttct ggaagcattg aaatccttag caccagcggg tattgcagat gctccacttt 180
ctccactgct cacttgcata cccaacaaga gaatgaatta ttttaaaatt agagataaat 240
aagacgtgcg tggtttctta agcacagctc ctccttcttg atattgcaca tgcacttcag 300
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gaatttttag aaatgctcac ataattgttg ggactgattc attcctccac gatatgcctc 420
ctctctctga tatcctgcta actgtagccg ttgtggcatt tgagatgaca ggacatatat 480
atatatggcc ccacacttga ccttgagtgc ctgaatgctc tgaaatcaag catatggcac 540
agcgctcaag actttgggt ttgtgtcctt ttttctatgg ctgtctcttc tcaattctgg 600
agaggtctgg ttccagtggc tggtttcyar ggattgattc ttaagctctg gatcacagag 660

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agaagcaaca aggaactata ctcaactcaa aacttttttag gagaatcatg aaattggtct      720
attcaaagga tggagttgag tccatwmtgt tattgttgca agaggttgca tatttggtga      780
gtcagttata taaaatagtg ttcttattgt aaatatgata cttctcataa tctattttat      840
catgtgtata acattcaaac tgacaaatat attgacttat gaataaaggt gtcaaaaaac      900
aaaaaaaaaa aaaaaaaaaa ctcgta                                           926


<210> 49
<211> 1593
<212> DNA
<213> Homo sapiens

<400> 49
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cattttctct ttctttctcc ctcttgagtc cttctgagat gatggctctg ggcgcagcgg      180
gagctacccg ggtctttgtc gcgatggtag cggcggctct cggcggccac cctctgctgg      240
gagtgagcgc caccttgaac tcggttctca attccaacgc tatcaagaac ctgcccccac      300
cgctgggcgg cgctgcgggg cacccaggct ctgcagtcag cgccgcgccg ggaatcctgt      360
acccgggcgg gaataagtac cagaccattg acaactacca gccgtacccg tgcgcagagg      420
acgaggagtg cggcactgat gagtactgcg ctagtcccac ccgcggaggg gacgcaggcg      480
tgcaaatctg tctcgcctgc aggaagcgcc gaaaacgctg catgcktcam gctatgtgct      540
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gagaaattga ggaaaccatc actgaaagct ttggtaatga tcatagcacc ttggatgggt      660
attccagaag aaccaccttg tcttcaaaaa tgtatcacac caaaggacaa gaaggttctg      720
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ctcatggact agaaatattc cagcgttgtt actgtggaga aggtctgtct tgccggatac      900
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gcttattttc tgaaatgtac tatcttaatg cttaaattat atttcccttt aggctgtgat      1500
agtttttgaa ataaaattta acatttaata tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa      1560
ctcgaggtcg acggtatcga taagcttgat atc                                   1593


<210> 50
<211> 978
<212> DNA
<213> Homo sapiens

<400> 50
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gggcccgggc aggggcaggg gcaggggcag gggcaggggc tgcctgtggt cagcgaggcc      120
caagcctggg gcttcggctt ccggctctct ctgcacccgt ccggtggctc cttcatccaa      180
tgccacccaa agatggtgac tccctgtcat gcccgtgtcc tggggctgcc ccagcaaaac      240
accacagacc agggcttaca caaggtgcgt gtatttcctc atggtcctag aggctggagt      300
cggaggtcac agtgtcagca gggttggctc cctcgargtc cctccttggc ttgtggccgc      360
caacaacttc ccgcatctca tgtggtcgtc cttctgtgtg ggtccccaty tygtcttctt      420
acrggacccc agtctgccgg atccgggccc gcccaacaac ctcacttgac ctagtgacct      480
ccttagacat ctgtctctaa gtagtcacat ctgggattac ggcgtgagcc atgttcccgc      540
ggaatttctt ttttatagta ttggataaag tttggtgttt ttacagagga gaagcaatgg      600
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gtcttagctc tttctctatt atgttatcat cctccctttt ttgtacaata tgttgtttac 660
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ttaaaacctt gaaggtctgt cataggactc tggacaatct cacaccttag ctattcccag 780
ggaaccccag ggggcaactg acattgctcc aagatgttct cctgatgtag cttgagatat 840
aaaggaaagg ccctgcacag gtggctgttt cttgtctgtt atgtcagagg aacagtcctg 900
ttcagaaagg ggctcttctg agcagaaatg gctaataaac tttgtgctga tctggaaaaa 960
aaaaaaaaa aaactcga 978

<210> 51
<211> 433
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (424)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (430)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (431)
<223> n equals a,t,g, or c

<400> 51
cggccgctct agaactagtg gatcccccgg gctgcaggaa ttcggcacga ggcgggaagg 60
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gggacaggca caagggaagc ctccagcccc ttttctgcca caagcaagag gcactcagcc 180
ctacctgaga tgtgttattt tttagaaata tctttattga tggtctttgc actcaatata 240
aaggcagcat atggttgttg caatataaat ggtacagaag tccacagagc aaaagggcca 300
gtttctgtcc cctttcctct ctccaggcct ctttctggga ccccattatt ggatagatta 360
agacctttcc agaccttgta aaaaaaaaaa aaaaaactc ggggggggsc ccggaaacca 420
attngcccn naa 433

<210> 52
<211> 861
<212> DNA
<213> Homo sapiens

<400> 52
gaattcggca cgagcctgag tcaacttgat atccaagctt tttacttcaa ttatctggca 60
agattacata gactgtcaaa gtttgtgaaa gtttagcaag aaaactgtct tactcacaga 120
accacaggac taactgactg aaccacactc caccatttgc ccctatttcc aggcgttatg 180
gtcaccctgt agtttctaat ctgtatagat gtgtagagca tgcctcttcc ctcttccttt 240
cccctccctg ttttcctttc ctcttgccct ttcttaatgt ctgtytctat tggcttcttg 300
atcttggtct ttaatgttca tccttaagct tgcttctctc ttcagactac tgattcagcc 360
tcttgcattt tctttcaact tgggccaaaa aaacaggcaa cattttcttc ctccactacc 420
tcatcatcat ccaatttatt cctttagttt atattaccac aactctccta aacgtcccaa 480
gtctattatt aagtctaaca acttagcttc gaacctcaat ccaagcatct gacaacacac 540
tgaaatgtgc aagcaagagt cccwatggcc gggtgcagtg gctcatgcct gtaatcccag 600
cactttggga ggccaaggtg ggatcacctg aggtcgggag ttcgggacca gcctggccag 660
tatggtgaag ccatgtctmw actaaaaata caaaattagc cggacattgt ggtgcacgtc 720

tgtcatccca gcaaggcagg cgaatcgctt gaacccggga ggcggaggtt gcggtgagcc 780
gggatcgtgc cattgcactc cagcctggtc aacagagcga gactccgcct cattaaaaaa 840
aaaaaaaaaa aaaactcgta g 861

<210> 53
<211> 510
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (396)
<223> n equals a,t,g, or c

<400> 53
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tgcctacacc accccccttt tacttagtat gtttatttttt tgtgtgtctc ttgccttcct 120
cccacgtttt atttcccctc agagctgtga atgggcaggt ctgtctctgg tttggcatca 180
ctgagttttt cccatgcatt ggccccaggg ctgctaggat gtgagacaaa tctccctaca 240
atgggcttgc tcccattgtc tgtacagttt aatagatgct ggcatgtcgg aggttaccca 300
tgagtcaaaa tccgctctcc atgcttactc ttgacacccc attgaagcca ctcattgtgt 360
gtgcgtctgg gtgtgaagtn ccagctccgt gtggtncctg tgcttgtact gyccctgctt 420
tgcagttcct ttgcacttac tcatcgagtg ctgttttgaa atgctgacat tatataaacg 480
taaaagaaaa aaaaaaaaaa aaaactcgta 510

<210> 54
<211> 309
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (301)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (305)
<223> n equals a,t,g, or c

<400> 54
gaattccccg ggataaattt catttcccaa agatgagtag gtatgaaaaa taatactcag 60
aagagattgt tcttgtgggg agaactgctt ctacaggatc tagctttgat tttgtatctt 120
tcaatctttt taaaatcaac tttaacgaat ttaaacctat tttaagtgta caagtaataa 180
gtttgacaat tgtatgtgac ttctaccaca ataaaatata gaacattttt atcattctat 240
aaaaaaaaaa aaaaaaaaac tcgaggggcg gcccggtacc caattcgccc tatagtgagt 300
ngtancgtc 309

<210> 55
<211> 1585

<212> DNA
<213> Homo sapiens

<400> 55
ggaatttctt aaatatgttc atgtataata cttgatcaaa atatttttgg gtttttgtt 60
ttgttttaat gggttagaaa atgtttacaa tcttggtctt atatgatcac caatggaata 120
gtaacttcca ggtttatatc aatatgagct gactttaact gagttgtttg ggatagggaa 180
gaagcagtcc ctctacagta tacaactact gcttgccagc tggatcaaaa taatcatgtt 240
ttatgaaaat atctccctta agcagtgtta aggttggttt gcagtgtgta agtggcacat 300
tgaactggaa gttttcttga aagctgcttc atctattaag aagcaatttt caaattgtag 360
cgaattatat tatcccctct tttaaagaaa cagtcgttat atgctgatgt ttcttaaaat 420
aactaaaatg tkcctcttaa tgtgatttta aatggagtta tttgtaggtc ctttcttagt 480
agtaaagaat cttctagagg gaaacatttg tgcttttagg gataatcttc cttgtgcctc 540
actacatccc taagtgggta tgactcttgt tattaccaca tgcttttta gtatatttca 600
caaatttact tttaaatatt attttagata cggtgtaaca tgtgcaattc agaataattt 660
tataacaggt catgaaaaac ataactttag ttaggattca caatatttgt wctccacata 720
atgagagaat gaatgagcct ttggagatac tgatataagg caattatttt ttgcaatgtt 780
gaatgtgttt tttagtttga ttctttttt ttcccccaat agggcactac ctgccatatc 840
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ctctattttt ctaatttcta ggatttttaa aataacattt ctgtaagtct gacatactaa 1080
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atgtattgag tctaatagga ctgttttgca ataattrgaa taaagattta tttcttctaa 1200
tcaaagatgc ataacagcta ttatctaggg gaccmccaaa tgtgatttca aaattttgtt 1260
aactattaca aatgtaatcc ttatatagaa attttaattt tgtaaagtag tgtataatat 1320
tgtaatatta aattcttgtt cttaaattca aatatgtatt gatcttcaat gtgctgtgtt 1380
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tttcactgtt ttattcctgt taaaaaaaaa aaaaagtcat ttgtaaccca tgcagaccat 1500
tgtttgatct atgctaactt atcaacttgg ctattcaata aagttaattg aaaagaaaaa 1560
aaaaaaaaaa aaaaaaaaa ctcga 1585

<210> 56
<211> 874
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (468)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (501)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (546)
<223> n equals a,t,g, or c

<400> 56
aggggaatct cggtgctgcg acgagtgtgg ggccagccgt ggaggctcca ggtgttctct 60
ctgccccagc agagcccggc aggagcccca acaggaagcc agcgcggcat ggctgccacc 120
gacttcgtgc aggagatgcg cgccgtgggc gagaggctgc tgctcaagct gcagagactg 180
ccccaggctg agcccgtgga gatcgtggcc ttctcagtca tcatcctttt cacagctact 240

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gttctgctgt tgctgctgat agcctgcagc tgctgctgca ctcactgctg ctgccctgag      300
cggagaggca ggaaggtcca ggtgcagccg acaccaccat gacggacggg cgatggctga      360
ggagaagctg gagaggagat ggccaatgcc atgacacagg ccatcagcct ggccctgcag      420
cccttacccc tcaagaccag gctcccctgg ccccagctct ggcccagncc caggtacctg      480
gacactgaca acttgagccc ntaccaagga aacaagggct ggtataggtg caaacctctc      540
atctgnccag tggacactgg gtgctgggga gtcagctgtt tcaaagactg ggtcaactgc      600
ctgggcttct tcgcctacct gcacttttta acaaaacaag gaagtagggg tccccatacc      660
ttgatggaga acagtcccca cctgtgggca attggccctt ggggctctgc tgatacatgc      720
caaagaggag caaggcaatc agaggggctt tgtgcaatag cttctgcatc cgagctcccg      780
ccagagcgtg agcatgtcag tattctagtc cagtatttgc cagtttccaa gtaaaagctt      840
ttgtgttaaa aaaaaaaaaa aaaaaaact cgta                                   874
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<210> 57
<211> 1169
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<400> 57
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atcccaaccc catttaaaaa taaaaattgt aaagcactcc attcaataaa agcacataag       120
tccccctcaa taattagtat gacaattcac gatacagctc ttactctggg agagtttatt       180
ttacccttta ttccaaaagg cacaaagtca tctgaggcct cagatattaa ccccactgca       240
tgttaatgac acaccactga ggtgcagctc aatgtaatta ttaaagctta taacacactt       300
ccccaagaat ttatagattc tttctataaa taataattta aaaaatactg caccttaaga       360
ccaatacagg cttaacaaaa gacctgaaat ttctgcaagg gcagttttgt ttcttgatag       420
aagtacaact tttgaaagtc tattcccagc aaaagaaaca ctagacccag cttggccaaa       480
gaaacaaaat aaaacaagtg atttctaaca cgctaaaaga gtacattttc atcagctcca       540
aagaaagcag tcctggtcat tcagaaggct cctatgatcc caccagtctg cagtcattag       600
aaatatatgc tttacaggcc acaggctgct ctggatttgg tttcagacac cagtgaccag       660
aagaagccag ttttgcgtgt gaggggtgtg ggcccccgct gccttgggcc tgctcaccgg       720
ggtggatgga ccccgccgg gtcacagcct gctgtcacgt ctggactgtt ggcctcttct       780
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ccggtgctgg ctgcactctc atttgtgagg ataaccccct ccttcttctt ttctcccaat       900
acctccagcc ccatcatcct gagataatga agccgttcat tcttgggcac aaaagttcga       960
atggaggcct ttccccgcca tccgcataag acgatgggac actgcagagc gtctggattc      1020
gcagaatctg gttcatactt cagcacgatg cttccctttg ccaggtcctt tgcttgactg      1080
taggtctcac tgctgagttt tctaaaaaag ggattttcct gggtcaacag tatcttaaca      1140
tcttccattg atacagtaat aattctttg                                        1169
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<210> 58
<211> 1066
<212> DNA
<213> Homo sapiens

<400> 58
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cagaacatat tcattcttac tgtaaattct atttgctgct tccaaaggtg atgattttca 180
agcagacatg ttctatatgg tctgtgtttt aggatctggt gcccagcctc tatcagagct 240
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ttgattaacc attttcttat gccttgctat tgacatattc atgctctttc tacgtctagt 540
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caatacgagg tactttctaa actattaagg gaggggttgt aycctcatgt tgagataaga 720
tgatggtcgt ttaaattttg caattttttt tggcctgcag ggatattttg tgtttatgtg 780
tccaaaaaag gaataaattg gcattcttgt gccaaaagtt gtttttcctg tcaattgtct 840
aataagtatg cagtacactg taatggcaac atacatggtt gctttataaa aacagtttcc 900
tcagtatgag aaattttaca aagaacagtg gaaaaacttt gtgtttttaa ctcttgggtc 960
tccctatttt taaaaattgc tatttggtat acaattatta tgtgtcaatt aaaactaaaa 1020
taaaactttt aaaaaaraaa aaaaaaaaaa aaaaaaaaaa ctcgta 1066

<210> 59
<211> 772
<212> DNA
<213> Homo sapiens

<400> 59
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gatatagtac ttaccactga gggtaaaatg agatataacc tgtgtaaata ctgtacacca 120
cagtcattca atagtggcag cttaaaaaaa ttattctacg attacccttg cttcagtgat 180
tcttcttggt gttattgaag ggtgagatct cggtggggat ctcccaggtg tttccataat 240
cccagcgatc accccaggga gaacctctct ccttaggctg ctagaggaca tgtgccatag 300
gaccagatag gagggagggg cagcggtggg aatgcgtttt cagagctacc tttggccaag 360
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aaccatcatc ccataggacc tgctgtagct ttgccagaag cctggcccaa ggggtggagg 540
cccctggagc tctgacccac cacgtggagg gtgggaaatg ccacagagca ggttctctag 600
aagggatttg tcagaagcta aactggggtg ccccctgggc tcaggcctgc acagtttctc 660
cctgaccacc cagctgggat ggatatagag acaggtgtca tgttgcagaa agccctgccct 720
aagaggccct actggtgttt tcctttatta aaaaaaaaaa aaaaaaactc ga 772

<210> 60
<211> 1198
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1189)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1191)
<223> n equals a,t,g, or c

<400> 60
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atcaatttga cacactgaat gcaagactat taaggaagaa cgattaaata ttattttatt 120

ttgtgaagag ttggcagcag attacatctc aagaacttgc agagagagga aggtagatgg 180
acaatcctaa attgtaagat gttacaaaaa acagtgaagt aagagtactc ctgaagacta 240
aaatagagag gctgggggttt gagccatttt actgagtagc ttagctggaa cctgatatca 300
gaagtagcct ttaacaaaaa gcctcttggc aattgtatgg tactaacaac tagagtactg 360
aagtgtaagt tgaaaccaag ttgcagtggg aaatcaaagg tgaggtagct tatttgaaac 420
cagcaaatga gacaggttgg acagttttaa aatctcttct aacaaagaaa ctgcacggta 480
gcaaggacta gcggttctca aagcccttct ttttcagtgt tctcattcac cttggcaccc 540
aagtatgttt aacaggccat gcattaaaaa taaatacaaa aatataaaag ccgcttaaag 600
ggaacttaca aactgacaat ctctcctctg tatttgtgtt catagtggct gggagtttaa 660
ttatatgcac aaaagttagg agccacttgt ttctgcacag actgtaggag caagatgagg 720
agatgggcag gttttggtaa gagcccccag ttctggtgga caggcatact tgtggcattg 780
ggtgcggcat tgctgggagg accacgtctt gggaggcgat tgacttttgg tttgtaattt 840
ccctttaaac aagaagagat ggctcacatt ttccatatat atctcaatga atgtactgta 900
ttactgtttt aaaaatttga tgaaatataa atgaattggt ctccttttgt tatctggtcc 960
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ttgtgtaaaa actgatgtaa tatgtgtatg aaacactgta tgtattatct gtatatagtg 1080
tgacaaaatc attttttctt ctttcttttg gatgtattaa taaatcttgc tgtgaagtaa 1140
aaaaaaaaaa aaaaaactc gaggggggc ccggtaccca ataaccctnt natgatct 1198

<210> 61
<211> 558
<212> DNA
<213> Homo sapiens

<400> 61
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gctttgagct catgggtgaa gtgaccatcc gctgcatcct gggacagcca tcccactgga 180
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cctacattta catcacaaga tgtcgctact attccaacct ccgcctgcct ctgatgtact 360
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gggaaaccag agagtatgag gtttctatct aaagagagct acacttgaga aggggacttg 480
tgaactcaac cacaatctcc tcgagggggg gccggtaccc aattcgscct atagtgagtc 540
gtattacaat taatgggc 558

<210> 62
<211> 616
<212> DNA
<213> Homo sapiens

<400> 62
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gtggagattg atgggtggaa aaaggagaga ggggagttgg acctgatacc aaagagatgt 120
tttcagccat caaccagctg caaaacaaga tgggcttcct tttcctacat attcttccaa 180
gcatcataaa tactcggtct gctccccaac ccacatcctg caggatgcag ccagagcaac 240
agccccactc cactctgaaa ccagtcatcc tagggatgat gatcatttct tagcttccct 300
gttggaggtc ggttggggtt ggctgatcgc tgcttggttc actcctgcac tggctgggcg 360
ttggctgcat ggtaaagctg ttccctgtct catcctgttg ggataaacag agtatcctag 420
gcatattttc tccagagcag tggcagacac aaagggtcaa cagaaaccct caaggttttg 480
tcatgcctac tcttgcaact agcacattgt catttcagcc tcatgctatt gaccaaagca 540
agtcacttga ccaaattcaa agccacaaaa ctcgtgccga attcgatatc aagcttatcg 600
ataccgtcga cctcga 616

<210> 63

<211> 811
<212> DNA
<213> Homo sapiens

<400> 63
gaattcggca cgaggagctt ccatcttttc tgatgtgagt ggtgtcagga atgactatgg 60
tggtggtagt ggcagtggcg atggttttct ggaggctgaa aggttaaagt cccaatgcag 120
aagtgatgtc agggctagtg ggtggcggta gcaggtgcag taaagtcagg ttcagatgct 180
tcaatggtga ctccctttctc gtgttagtcc tacagcatca tttcagactt tgttcttggt 240
gcttagctcc aagcctcttc ctcctgctgt cctgtcaggt tgtgtccact atgatggagc 300
aagaccctgt catctatgat gatgatgacg acttgcctaa ttatttttct gtttaagcta 360
gccatagtgg atcctgttat ttgtgcctaa gagctcttac tgacaaagaa cgtgttaccg 420
gaagtgggat gctacaagta acaacactaa aagtagaatt gactaagtgc agcaggcagg 480
cctttgagca aggaggggac acacattaca ggctggaaag ctggtgactc ttgtaatgca 540
gtggcaaaat tttgcttcaa ctactatata caatacttga agatgcacac tgcaagctga 600
gtgaggctgt gataagaggg gaaatagtgg ggagcattca gaatgttggt ttacattgat 660
gacttcttgc tctttcagca gtcttgatag agcagctata cccacaccag agtcctccag 720
ctgacaagag aggtaaggag agaaactgct ttgccaggag gggccctctg ctgcagctgg 780
aggtccaagt tgaccgagag cccaaatttt g 811

<210> 64
<211> 993
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (370)
<223> n equals a,t,g, or c

<400> 64
ggcacgagcc caaagtgctg ggattacagg gagttgatga aagtggagat gtttttagag 60
ctacctatgc agcattcaga tgttctccta tttctggtct gctggaaagc catgggatcc 120
aaaaagtctc catcacattt ttscccagag gtaggggggg ttatscccag ttttgggatg 180
ttgaatgtca ccctcttaag gagcctcaca tgaaacacac gttgagattc caactctctg 240
gacaaagcat cgaagcagaa aatgagcctg aaaacgcatg ccttttccacg gattccctca 300
ttaaaataga tcatttagtt aagccccgaa gacaagctgt gtcagargct tctgctcgca 360
tacctgacan gcagcttgat gtgactgctc gtggagttta tgccccagag gatgtgtaca 420
ggttcctgcc gactagtgtg ggggaatcac ggacacttaa agtcaatctg cgaaatаatt 480
cttttattac acactcactg aagtttttga gtcccagaga gccattctat gtcaaacatt 540
ccaagtactc tttgagagcc cagcattaac atcaacatgc ccgtgcagtt caaaccgaag 600
tcccgcaggc aaatttgaag ctttgcttgt cattcaaaca gatgaaggca agagtattgc 660
tattcgacta attggtgaag ctcttggaaa aaattaacta gaatacattt ttgtgtaaag 720
taaattacat aagttgtatt ttgttaactt tatctttcta cactacaatt atgcytttgt 780
atatatattt tgtatgatgg atatctataa ttgtagattt tgtttttaca agctaatact 840
gaagactcga ctgaaatatt atgtatctag cccatagtat tgtacttaac ttttacaggt 900
gagaagagag ttctgtgttt gcattgatta tgatattctg aataaatatg gaatatattt 960
taaaaaaaaa aaaaaaaaaa aaaaaaaaaa att 993

<210> 65
<211> 689
<212> DNA
<213> Homo sapiens

<400> 65
gaattcggca cgagctaagg tgggcgggtc acttaagcct cgaactcctg gcctcaagca 60

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atcctcctgc ctttccttcc caaagctatg aaattgcaga caggagccac catgcctggc      120
tggtttttgg gggccatggc aagtgcaggc ttgtcagagg aattggagaa gcagggatta      180
gttaggaaaa cctctccact tcttgtgttt catgccaggt agtgtttgta acttcagaac      240
ccgcccttac cttacctacc taccatgtta tgctcatttc acctactgtc ccctgctgta      300
tagggagtgc cttgagggca gagatcatgt tagttttgtt ccctcttctg tacagagggt      360
ggagcccagt acctggcaca gctgaaggag gaatgtgctg ctgctgtctc tgtatttcca      420
ggtactcctt gttgacctct agccaagaca aggaacctcc ttatgagatg tcatcttctg      480
agctctcttg atggagggaa taccacggtg atgattgaat atgaaaagtc ttggcacagt      540
ggctcacacc tgtaatccca acactttggg tggccgaggt gggaggattg cttgaagcca      600
ggcattgaga ccatccttgg ccaccaaacg agaccccatc tctacaaaaa aagaaaaaca      660
aaaccaaaaa aaaaaaaaaa aaactcgta                                        689


<210> 66
<211> 942
<212> DNA
<213> Homo sapiens

<400> 66
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ggaccagcgt ctgggtggga cacagttcac tcctctctcc acttcatgtt ctttttcttc      120
agcagatggc tcaagttcct tgtttttctc cttgctttct gacagccgta gcttctgaaa      180
cctgccattt ttggtctcct gatgcctgat ttcctaattg tcctgactgt gtcttctagg      240
aagcattaag tctgaactga cttattaggg aacttcagaa agttaaacac acaaaaccct      300
ttctttgact cctatcttaa ggacatggag atacagttac atatatttat acacaaggat      360
attcatatgg caaaaacggg gagaaggcac aatttaagag cccaatgggg actgggattg      420
tgtatgcatc tgtacaatga catgttatga agtcattctg ttttttataa aacttttag       480
tgacatggga aaatacaaag aatgtaaaga atttaaaaag cagcgtacaa aacmatatat      540
gtgatccaat ttgtggtgga aatattttat ctatatatat ccatttttaaa mcaccaarga      600
aaatacacag ttaacagtag ttatctttgg aaggcaggat tataagtgat cttagttttc      660
ttccttccac ttttgttacc gatatcagaa aaaaactctg tctctacgaa aataaaataa      720
aatgaaataa aataaaatta gctgggtgca gtggctcatg cctgttgcct cagctcctca      780
ggaggctgag gcgggagaat cacttgggcc cggcaggtcg aggctgcagt gagctaggat      840
cgtgccactg cactctagcc tgggtggcag caagaccttg tctcaaaaaa aaaaaaaaaa      900
aaaggaattc gatatcaagc ttatcgatac cgtcgacctc ga                         942


<210> 67
<211> 2309
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (652)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (677)
<223> n equals a,t,g, or c

<400> 67
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ggtaagagag aangtgtgaa gtcacctgtc tgttctagtc attccaatgg acattgtact       60
ggcccaggag gaaagaacca gatgtggttg tccagtcatc caaagcaagt ctctagcaca      120
aagcccgttc cactgaactg cccttctcca gtgcctcctc tgtatttgga tgatgatgga      180
ctccccttcc ccacggatgt gatccagcat aggttacggc aaatcgaagc agggtacaaa      240
caagaggtgg agcagctacg tcgacaggtg cgtgasttca gatgaggctg gacatccgtc      300
actgctgtgc ccctccagca gagcccccca tggactatga ggatgatttt acatgtttga      360
aggagtcaga tggcagtgat actgaggatt ttggctctga tcacagtgaa gactgccttt      420
cagaagcaag ctgggaacct gttgataaga aagagactga ggtgactcgc tgggttccag      480
accatatggc atcacactgc tataactgtg actgtgaatt ctggttggcc aaacgaagac      540
accattgcag aaattgtggg aatgtatttt gtgctggatg ctgccacctg aagctgccca      600
ttcctgatca gcaactctat gacccagttc tcgtctgtaa ctcatgttac gnaacacatt      660
caagtctctc gtgccanggg aactcatgag ccaacagctg aagaaaccca ttgctacagc      720
ttccagttga atgccgggga gaaacctgtc caattttagc aggtttgaag ggaggatctt      780
cttcagttgt agtttggaag gttccttggt gtggctcatg aaatcacaga gctcagagat      840
accatcttga gaaatcctcc ttggtatcat gaaactggag cagaggaatt gcaatttagc      900
aggaggtcct ctactggtga taccctcacc ttggggtaat ggtcctaacc cagacccagg      960
gtctggaaag cttaatgttg agttggtgac tccagcctct ttctcctgga ggtcacaaga     1020
tgatgattgc gtagatgttg cctggtgcaa agtgccccaa acagcaatag aaaggcatat     1080
gtataaccaa actccaagtg ataaccagac ccatctctcc tccaccttga caaaagcaga     1140
ttatagtata caaggtagga attcctgtcc tatttgagat gaactatatc ctgtacctct     1200
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ctgtctttct gtggagtttg gtttgaagac tggctcagca agtggaggtt tcaatgtatt     1320
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cactgtgaag aatgagaagg gaaaagcaaa aattatcctt gtgaaatatc tgctgattgt     1560
gccctactct ttgcacctga cttttcctag ttgtcctggt gctaacacag gagctacacc     1620
ttgatcctct cctggcatga aaataaaaca aaggttttcg ttgttgttgt tccattgccc     1680
atttccccca tgttgtcttt cccttggctg atgcctcctc tgggtcacat tgcttcttat     1740
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gctgtttggt atgtgagggt ttcagtacaa atgctgctgt ctatttctgt gcacttaaca     1860
atggaaccca aacagaagag aataaagcct tgataccaaa attggaaaag aacatgtgtc     1920
catttggacc aaacgttgtt ggtttttaaa aaattttatt ttgttttttt gtttttgttt     1980
ttgttttttt tcatcttaat atgtaccagt ggcacttaac caaaagatac agtgatatag     2040
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gcatggcctt ggagagagac tctgggctct tggctcagat gtgttcatca aatactcctt     2160
tcagagctgt tgtgggtgta agtgacatga tgtggccaaa aatccaaact gtgcagttgc     2220
gttgtgacaa acatgcaatg tgctgtaaaa attcaataca gtttaaataa aatctctata     2280
ttagtaaaaa aaaaaaaaaa aaactcgag                                       2309


<210> 68
<211> 814
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (421)
<223> n equals a,t,g, or c

<400> 68
tacgagtttt ttttttttt tttagccata attaccaaaa acattagtgc aggacaccat       60
tttaaaaaac tatttaaaat agtcttcaga gaaaaaatat taagtattac agtttaggag      120
tatattgact ttgggccaac ggattccaat attttacaaa aaggcaatat ccacgcaaca      180
tattccagat tcgggttgtg gagaagctgc agggcttgag gtgactctat cacaactgct      240
ttccgtacgg aggagccact gccaactgtg tggacgagaa tacttaagca cgtgcttcat      300
tgctccactg ccacaggtgg atatttcagg ggaattatta ttaatttcaa agttttttta      360
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aaargytatg ataagtaaat aaaagtaatg gtaggaktca cggtcggaga gcttatcgcc      420
naagtctttc tatagccttc ccccggaagc cccagttcag gcatcggtca cccgaagtgt      480
caccctctga tctttccccc atcccatctg aggaagttaa agagatccct cacaggtacc      540
gtggctctcg gtgccctcgc acttccaaca gccggttcgg gcccaggaga ctcgctccga      600
cctccaccac aatggcggcc agtgtgggcc gcgcaaccag aagtgcggcc gcgcacctga      660
cccagcttcc gcctgcacct agagctcagc gcaccagccc ggctcagcca gacgaaggca      720
aacgaagaga tgcggatccc tggaggactg gccccaccgt gaacaaaaca ggaagcattc      780
caggaagact gcgggggtgg gctcgtgccg aatc                                  814


<210> 69
<211> 788
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (370)
<223> n equals a,t,g, or c

<400> 69
gaattcggca cgaggcaatt ttcaatgaac cttgaatggt aggaagaatt gaagaagaaa       60
tcagagcatt tttgccttgc agaaggcagc tgctgtgatg gcaggaggct gaaatggaca      120
tggcctggca gaagagtatt atggggtggt tgtgttgtga gccatctggc ctgtacaatt      180
tggagaaaca atactttttt ttttcttctc tgcaagctgg gcttcctgtg attgtgtcct      240
caggctgcac aaaaatagcg tatggctttg ctgtgtattc accttcatct taaaatagct      300
agaacatttt ccctcttctt ttaaaaagtt tttaaaatga gggttagact cttgtaggaa      360
aaggtagaan tcttaataac agtactcatg ttgacaaacc tttctcgtca aaattcctat      420
gtaatcaaga ctcttattaa atatgaacaa atgtaatgta tggaaattaa tgtttaccct      480
caaggtaaaa gctgaaatgg atttataaag aattatttta aacagcaata atgtttgagg      540
ggtgggggaa gtgagaaaaa tgaaatttta aatcacatgt ttatgactat gaagctagac      600
tttaaaaata ggtcagttag ggtatgactc ttataataca aaagtttatt tggtatacaa      660
aggatttata gctaatgtat tttttaatta tattcactaa tacttgtaaa agatcattca      720
atttataaag tttccaaaat aaacctgttt aaagtgtcaa aaaaaaaaaa aaaaaaaaaa      780
aaactcga                                                              788


<210> 70
<211> 791
<212> DNA
<213> Homo sapiens

<400> 70
gaattcggca cgagctcaag gctaaaatct tgatctctcc tgaatatgag gaggtgtgtt       60
aggcatgttt tggggattgg attaatagtg ttaaaaaatt tgtattttca caaaaatagc      120
atgtacccat cacccaaact cagcagcttt caagaagctt ttctttttct ctttcttatt      180
ttaaaaaatc ctttaacctt atgtagttag tatatctttt ttaaaaagta gaaaatcatg      240
taaccttagg atttttagtt ttaatgtaga gtttcacaaa tttccatctt tagtaagaca      300
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ccatggttgt cattatcgag cacgtaactg catgttagac tctatgctaa gtgttttaca      420
taatcattta aagctcacta aggccctagg agtaattatt atcctcccat caaaaaggta      480
agtgaaatgt taacctgaag tttgactact ttaggtctct gagctagtaa gtacaatagc      540
caggtttcaa accaagatcc ttttaactgc agcacctgtg ccttatctgg tagcgtcatc      600
ttggttcata catttaaaaa agagttatct atgtgccggg tgccctggct catgcctgta      660
atcccagcac tttgggaggc cgaggagggc ggatcaccag gtcaggagtt tgagactgac      720
caataaggtg aaatcctgtc tctactaaaa aaaaaagggg gggcccgtac ccaatcgccc      780
aaaaagatcg t                                                           791
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<210> 71
<211> 804
<212> DNA
<213> Homo sapiens

<400> 71
gaattcggca cgagcggcac gagcttgaaa tggcgtcttc tgatgaacac tcatccatcc 60
ttcaaggtct actctctcat cacagcttgt gactcttcca ctttttgaac tggtgtttcc 120
cattcccagt tcacagagcc ctttctcatt gaactattta tctgagttcc ctctgccgga 180
acatgagcca tgcctagagt agccacctag tagtgagtga cagctctgtg ctggatgcac 240
ataaatggtc tccttaact gccatgagsc ctaaagaagg tttgctacag ctattttaca 300
gatggggaaa actgacagag agatattaat gaattgccca catgcaaata tgtgctgagt 360
cttggatttg catctttatc gtgactccac ggagacccac cctctaagac cagagccagt 420
gtcctattca tcttttgtct ctgcagcgtt cagcatggca ctgtcttggc ttacaaaatc 480
tgctctatgc ttgctgactg ctgaatgaat gaatgaatga ataggtagtc acaaagaatg 540
tttagaatgt ttctcagaca ggctgagaaa aaacacaacg aaacattatt tccgtttgga 600
aagttttttt attttgtgt tcagtactga agtaaaacaa aaatctgaat aacagctgca 660
ccgttaaaaa tgaaattacc aatatatgaa ctctaggcat catgcatata taatttttg 720
tagataactt ttcttctcat tttccttctc attctcttca tctttttctt tttgtttgag 780
caaaaaaaaa aaaaaaaaac tcga 804

<210> 72
<211> 783
<212> DNA
<213> Homo sapiens

<400> 72
gaattcggca cgagctaaaa cttacaatga catgttgttg cttgctctgt aagctccaag 60
gcatttttttt tttcagtttt aattcaagtg ttctaaaaag tattttgggt acaaccagaa 120
ctctctctgc tccttggatt ggagtcagtg tgaaaggaac acagtgggct ctggggtcag 180
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agcatatgta tacaatgcct gccatagtga gtgcctggcc cttggcagac tgtcaaatgg 360
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cagttcagat tccttctcct ttttaaatta ctgcaacctg attttacctg cccctgcctc 480
caagttgctg tatcagttag cctctgaaca attcatttag caatttttaat tatatattgc 540
ttcttgacac tgctttgtga tcttaaaaac tctgcttcaa atacgtactt ggttgctttt 600
cctgagtgct gttaattcct gctctaacgg actaaagtaa tttgaaggca ggactaggtt 660
ttatgcatgg cacacagtct ggtgccttac atgtaactac tcacaaactt ttttgatcca 720
aaatttagaa acttcacacg cattcataag aaatcaataa aaaaaaaaaa aaaaaactcg 780
tag 783

<210> 73
<211> 1523
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (8)

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

<400> 73
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ttttttaaa tatttttgaa aaaatataat ttttttacaa tattttcaac ttaaacacta 120
ttcacactga acacgtatgg cagcttaacc tacccaaata tgaagtttaa gaagccaaaa 180
ctgttctagc tttgttaaaa gttgtgctgc agactctcgt gatggttaac aaagcaagga 240
aaagcaccac tcaaatcata atgttacagt atctttgttc agctggatta tgggttggta 300
ttggtcatat gttagactcc atacaggcat agctatgatg cagtgaatcc cttagaagtt 360
acaattctca aattacatac ttcctcagat gtaacattag aactcaatat ttctaacaat 420
aacataccag aaaaggctgg actggcactc atctgctgac taacttgtag cctcagtaat 480
atgacatact tgcctttaac aaattatctc aaattaacta acagaccttc agaaaatgga 540
gattcttttt gatggggaca taatcaaatt taagtctgag aaatatgctt aacagttgga 600
actcaaatta aatgtactga ttttaaagtt tagacattaa caagtgatag attagcctca 660
aaaaaagaca atttggtaag gtttaggtct tttaatttgg tgcttgttca caacttgact 720
ggtgcttctt tccttgctgt cttcacatca agccatgggg ccaattctat tttcagtaaa 780
tgtttgacag ctttttactt agtaacagtc tcagcacttt tattaagcat gcaagactaa 840
caaaaacttt ggcaatgcat aagtgtaaca cagtgacaag agagcttta caattaagtc 900
ttctaatact gccttcacag tgtggaaatt gtgctacatc caccaaaaga gggccccgtc 960
tactcaaata tttccgtact tcaccccagg aacaaactcc tttgcatttg gattcagatt 1020
gctcttgacc acaagatctt ccagagaaga gccatcactg ataacaaggt cattaaactg 1080
gtcttggatt tggtccatag tttgtgggag atctcgagct ggaataaacc attcatgctc 1140
ttcttcctct tccagcattt cttggaaaca gcgttcaata aattcttctt cccataactc 1200
ctcttctatt tgtctgttga attcttcttc attttccatc cacatgtact ctgcaaatgg 1260
attgtcatct tcatgagaat gaccgttaat aatcacatct tcattgatga tgcttgggct 1320
agtactgctg cgacttggat ctttcatggc tgatgttggt tgtcgttttt aacccaatgc 1380
acagcagcgg ggacggcagc caacgaatcc tgtcggcctc cgcggatctc cacaggcagc 1440
gccgctcccc cgctcgacgt gcgcttcgcc cgccgcctcc cttctcccgg acgcgtgggc 1500
ggacgcgtgg gcggacgcgt ggg 1523

<210> 74
<211> 758
<212> DNA
<213> Homo sapiens

<400> 74
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cgtgatctgc ctgcctcggc ctcccaaagt gctaggatta caggcatgag ccactgtgcc 120
cggcctttgt tttttgagac ctttttttatt ttgttgtcac ccaggctgaa gtgcagtggc 180
acaaacacag ttcactacag ccttgacctc ctgggctcaa gcaattctgc ctcagtccca 240
caagtaggtg ggcttacaaa tgcacagcat gacacctggc ttatttttgt atttgtgtg 300
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aacatgtaaa atgctcagta caggccaggc atggtggctc acgcttgcaa tcccagcact 480
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ctgtggtccc agctactcag aggctgaggt gggagaatca cttgagcccg ggagacagaa 660
gttgaagtga gccaagatgg cgccactgca ctctagcatg ggctacagag tgagagcctc 720
tctcaaaaaa aaaaaaaaaa aaaaaaaaaa aactcgta 758

<210> 75

<211> 1096
<212> DNA
<213> Homo sapiens

<400> 75
ccccacggct cccatggcct cttcctgcgc taccgtgtgg aggccctaac cctgcgtggc 60
atcaatagct tccgccagta caagtatgac ctggtggcag tgggcaaggc tttggagggc 120
atgttccgca agctcaacca cctcctggag cgcctgcacc agtccttctt cctctacttg 180
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aaaaaaaagg gcggcc 1096

<210> 76
<211> 1230
<212> DNA
<213> Homo sapiens

<400> 76
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tgccaggcac tgtgctgaat gcattagatc atcaattatg aatttgacac caaggacctg 180
gtgtgcctgg gcctgagcag catcgttggc gtctggtacc tgctgaggaa gcactggatt 240
gccaacaacc tttttggcct ggccttctcc cttaatggag tagagctcct gcacctcaac 300
aatgtcagca ctggctgcat cctgctgggc ggactcttca tctacgatgt cttctgggta 360
tttggcacca atgtgatggt gacagtggcc aagtccttcg aggcaccaat aaaattggtg 420
tttccccagg atctgctgga gaaaggcctc gaagcaaaca actttgccat gctgggactt 480
ggagatgtcg tcattccagg gatcttcatt gccttgctgc tgcgctttga catcagcttg 540
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ttcagttatg aggagtcaaa tcctaaggat ccagcggcag tgacagaatc caaagaggga 780
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tgggtgtgat ttttagattt tgtattgtgg actgattttg cctcacatta aaaactcatc 1140
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aaaaaaaaaa aaaaaaaaaa ggggaggggc 1230

<210> 77
<211> 911
<212> DNA

<213> Homo sapiens

<400> 77
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tagaaagagg gctccttttct gagaaagaag aatttcaaag agtccaagag aaccaaaaat 180
tcaggaccca ggagggtaag cattcctgtt tttgcaagct tcacagacca tttgagtgag 240
tgggtttttc aggtgacatt taaatgaaca aataatatcc atgtctcagg gtcagaaatg 300
gtactttgca actgattctg tccctcttga gaggcttctg caagactgag agggtgggat 360
gacttaatga acattaaaaa caatgttatt aggckggata tggtggcaca tgcctgtaat 420
tctagcactt tgggargctg aggtgggcag gcccargart tcaagaccag tctgggcaac 480
atggtgagac cctgtatcta ataaaaatac aaaaatttag ccaggcatgg tggcacacac 540
ctggagtccc agctactcag gagactgagg tgggaagatc acctgagctc aggaagtcga 600
ggctgcagtg agccaagatt gcactactgc actctagcct acatggatag gagtgagacc 660
tgtttgaaaa acaaaaaaca atcaaaaaca aaaaaaaaca acccacacaa tgttattttt 720
aaaatactga ggggagagaa gttgggggaaa aaaagggaaa acctaaaact ctccataatc 780
ctaccatcag aaaattacac taatgtgata agtgactttc tcccctctga atctccaatt 840
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<210> 78
<211> 488
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (324)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (438)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (484)
<223> n equals a,t,g, or c

<400> 78
accgcagggg ctcccggacc ctgactctgc agccgaaccg gcacggtttc gtggggaccc 60
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gccgtacccs ttgcgcaaaa gaacraaaga aatttgccgc actgaaataa atttacttgc 420
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tttnttcc 488

<210> 79
<211> 753
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (745)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (752)
<223> n equals a,t,g, or c

<400> 79
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cagagcagcc tgtggcctgt aaagcatata tttctaatga ctgcagactg gtgggatcat 180
aggagccttc tgaatgacca ggactgcttt ctttggagct gatgaaaatg tactcttttа 240
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tttgctggga atagactttc aaaagttgta cttctatcaa gaaacaaaac tgcccttgca 360
gaaatttcag gtcttttgtt aagcctgtat tggtcttaag gtgcagtatt ttttaaatta 420
ttatttatag aaagaatcta taaattcttg gggaagtgtg ttataagctt taataattac 480
attgagctgc acctcagtgg tgtgtcatta acatgcagtg gggttaatat ctgaggcctc 540
agatgacttt gtgccttttg gaataaaggg taaaataaac tctcccagag taagagctgt 600
atcgtgaatt gtcatactaa ttattgaggg ggacttatgt gctttattg aatggagtgc 660
tttacaattt ttatttttaa atggggttgg gatccttgga atatttcaat aaaattgata 720
aaatataaaa aaaaaaaaaa agggnggccg cnc 753

<210> 80
<211> 2138
<212> DNA
<213> Homo sapiens

<400> 80
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ctggacatcc gtcactgctg tgcccctcca gcagagcccc catggactat gaggatgatt 180
ttacatgttt gaaggagtca gatggcagtg atactgagga ttttggctct gatcacagtg 240
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gctgggttcc agaccatatg gcatcacact gctataactg tgactgtgaa ttctggttgg 360
ccaaacgaag acaccattgc agaaattgtg ggaatgtatt ttgtgctgga tgctgccacc 420
tgaagctgcc cattcctgat cagcaactct atgacccagt tctcgtctgt aactcatgtt 480
acgraacaca ttcaagtctc tcgtgccagg gaactcatga gccaacagct gaagaaaccc 540
attgctacag cttccagttg aatgccgggg agaaacctgt ccaattttag caggtttgaa 600
gggaggatct tcttcagttg tagtttggaa ggttccttgg tgtggctcat gaaatcacag 660
agctcagaga taccatcttg agaaatcctc cttggtatca tgaaactgga gcagaggaat 720
tgcaatttag caggaggtcc tctactggtg ataccctcac cttggggtaa tggtcctaac 780
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tccattgccc atttccccca tgttgtcttt cccttggctg atgcctcctc tgggtcacat 1560

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aacatgtgtc catttggacc aaacgttgtt ggtttttaaa aaattttatt ttgttttttt     1800
gtttttgttt ttgttttttt tcatcttaat atgtaccagt ggcacttaac caaaagatac     1860
agtgatatag ccatgtatct gtctacttag cgtggctgtt ttgagggact gtcccatcag     1920
tgaacaaact gcatggcctt ggagagagac tctgggctct tggctcagat gtgttcatca     1980
aatactcctt tcagagctgt tgtgggtgta agtgacatga tgtggccaaa aatccaaact     2040
gtgcagttgc gttgtgacaa acatgcaatg tgctgtaaaa attcaataca gtttaaataa     2100
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PCT/US2003/041202

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<210> 81
<211> 1327
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1205)
<223> n equals a,t,g, or c

<400> 81
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 ggctgccgtc cccgctgctg tgcattgggt taaaaacgac aaccaacatc agccatgaaa     180
 gatccaagtc gcagcagtac tagcccaagc atcatcaatg aagatgtgat tattaacggt     240
 cattctcatg aagatgacaa tccatttgca gagtacatgt ggatggaaaa tgaagaagaa     300
 ttcaacagac aaatagaaga ggagttatgg gaagaagaat ttattgaacg ctgtttccaa     360
 gaaatgctgg aagaggaaga agagcatgaa tggtttattc cagctcgaga tctcccacaa     420
 actatggacc aaatccaaga ccagtttaat gaccttgtta tcagtgatgg ctcttctctg     480
 gaagatcttg tggtcaagag caatctgaat ccaaatgcaa aggagtttgt tcctggggtg     540
 aagtacggaa atatttgagt agacgggggcc ctctttttggt ggatgtagca caatttccac     600
 actgtgaagg cagtattaga agacttaatt gtaaaagctc tcttgtcact gtgttacact     660
 tatgcattgc caaagttttt gttagtcttg catgcttaat aaaagtgctg agactgttac     720
 taagtaaaaa gctgtcaaac atttactgaa aatagaattg gccccatggc ttgatgtgaa     780
 gacagcaagg aaagaagcac cagtcaagtt gtgaacaagc accaaattaa aagacctaaa     840
 ccttaccaaa ttgtcttttt ttgaggctaa tctatcactt gttaatgtct aaactttaaa     900
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tgttaaaggc aagtatgtca tattactgag gctacaagtt agtcagcaga tgagtgccag     1080
tccagccttt tctggtatgt tattgttagr aatattgagt tctaatgtta catctgaggr     1140
agtatgtaat tgagrattgt aacttctaag gggttcactg catcatrgct atgcctgtat     1200
ggrgntctwa ccatatgacc mataccamcc cwtaatccca gctgraccaa rgrtacckgt     1260
aaccattwwg gatttgaggg gkggcctttc ccyggcyttg kttwacccmt ccacggagaa     1320
tctggca                                                              1327
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<210> 82
<211> 758
<212> DNA
<213> Homo sapiens

<400> 82

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gaattcggca cgagacacgg tttcaccctg ttggccagga tggtctcaat ctcttgacct       60
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cggcctttgt tttttgagac ctttttttatt ttgttgtcac ccaggctgaa gtgcagtggc     180
acaaacacag ttcactacag ccttgacctc ctgggctcaa gcaatttctgc ctcagtccca     240
caagtaggtg ggcttacaaa tgcacagcat gacacctggc ttatttttgt attttgtgtg      300
tgtgtgtgtg agccactgcg caggccttgg gcagctttct tgatctctgt tacctcatct      360
ataaaatgat gataataata gcttctccct tattggggaa ttgtaatgat taaatgagat      420
aacatgtaaa atgctcagta caggccaggc atggtggctc acgcttgcaa tcccagcact      480
ttgggaggct gaggctgcta gatctcttga ggccagcagt taagaccagc ctggccaata      540
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ctgtggtccc agctactcag aggctgaggt gggagaatca cttgagcccg ggagacagaa      660
gttgaagtga gccaagatgg cgccactgca ctctagcatg ggctacagag tgagagcctc      720
tctcaaaaaa aaaaaaaaaa aaaaaaaaaa aactcgta                              758
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<210> 83
<211> 47
<212> PRT
<213> Homo sapiens

<400> 83

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Met Gly Ser Cys Ala Ala Phe Leu Leu Ala Ala Leu Ser Leu Leu Gly
  1               5                  10                  15

Val Leu Gly Gly Tyr Pro Gly Arg Arg Ala Phe Ile Leu Pro Asn Arg
            20                  25                  30

Arg Ser Leu Arg Gln Trp Leu Glu Val Ser Leu Gly Pro Val Ser
        35                  40                  45
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<210> 84
<211> 37
<212> PRT
<213> Homo sapiens

<400> 84

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Met Asn Glu Ala Pro Pro Leu Ser Ser Ser Ser Ile Cys Phe Ile Leu
  1               5                  10                  15

Phe Tyr Phe Phe Pro Leu Leu Pro Pro Leu Ser Ser Thr Cys Phe Ser
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20 25 30

Lys Gly Asn Arg His
35

<210> 85
<211> 52
<212> PRT
<213> Homo sapiens

<400> 85
Met Cys Gln Asn Arg Glu Ser Val Leu Val Leu Leu Ile Glu Ser Asn
1 5 10 15

Met Phe Ser Phe Tyr Leu Leu Phe Ser Phe Tyr Ile Val Phe Ser Phe
20 25 30

Phe Ile Val Leu Arg Pro Leu Pro Arg Asn Glu Ser Ile Lys Lys Ile
35 40 45

Gly Val Ile Phe
50

<210> 86
<211> 25
<212> PRT
<213> Homo sapiens

<400> 86
Met Thr Val Leu Ala Lys Arg Leu Val Leu Phe Leu Gly His Ile Phe
1 5 10 15

Leu Leu Leu Cys Val Arg Ile Leu Asp
20 25

<210> 87
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 87
Met Ala Ala Arg Ser Ala Leu Ala Leu Leu Leu Leu Leu Pro Val Leu
1 5 10 15

Leu Leu Pro Val Gln Ser Arg Ser Glu Pro Glu Thr Thr Ala Pro Thr
20 25 30

Pro Thr Pro Ile Pro Gly Gly Asn Ser Ser Xaa Ser Arg Pro Leu Pro
35 40 45

Ser Ile Glu Leu His Ala Cys Gly Pro Tyr Pro Lys Pro Gly Leu Leu
50 55 60

Ile Leu Leu Ala Pro Leu Ala Leu Trp Pro Ile Leu Leu
65 70 75

<210> 88
<211> 37
<212> PRT
<213> Homo sapiens

<400> 88
Met Cys Tyr Ile Pro Gly Ser Thr Gly Gly Gln Cys Trp Pro Trp Cys
1 5 10 15

Trp Cys Trp Leu Cys Arg Glu Ala Leu Glu Trp Leu Cys Gly Ala Val
20 25 30

Ser Ala Gly Pro Ala
35

<210> 89
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 89
Met Leu Leu Arg Ile Ile His Leu Val Ile Phe Phe Ile Asn Phe Ser
1 5 10 15

Thr Ser Val Val Ile Val His Tyr Asn Val Leu Asn Tyr Arg Cys Leu
20 25 30

Leu Lys Cys Arg Cys Arg Val Xaa Lys Tyr Ser
35 40

<210> 90
<211> 59
<212> PRT
<213> Homo sapiens

<400> 90
Met Gln Asn Cys Leu Gly Ser Leu Ile Pro Gly Val Leu Phe Ser Leu
1 5 10 15

Leu Leu Leu Pro Ser Met Phe Asn Ile Ile Leu Thr Gln Ser Lys Tyr
20 25 30

Gly Glu Asn Ser Tyr Pro Ala Cys Phe Tyr Ser Ser Ser Asn Phe Pro
35 40 45

```
Val Ser Ala Ile Thr Phe Leu Val Gly Val Val
     50                  55


<210> 91
<211> 54
<212> PRT
<213> Homo sapiens

<400> 91
Met Val Val Ile Val Leu Thr Ser Asn Val Cys Ile Cys Gly Tyr Val
  1               5                  10                  15

Val His Ser Ala Leu Ile Pro Arg Arg Gln Gly Leu Phe Leu Phe Leu
             20                  25                  30

Phe Leu Val Met Phe Tyr Phe Ser Ile Ala Phe Asn Arg Ile Thr Lys
         35                  40                  45

Gly Thr Leu Ser Ser Gln
     50


<210> 92
<211> 50
<212> PRT
<213> Homo sapiens

<400> 92
Met Val Ala Gln Leu Val Gly Cys Val Val Ser Cys Leu Phe Val Leu
  1               5                  10                  15

Leu Arg Phe Leu Ile Ser Thr Phe Gly Ile Met Ser Phe Asn Gly Phe
             20                  25                  30

Val Ile Phe Val Thr Val Leu Ala Ala Tyr Asn Phe Ser Ala Gly Ala
         35                  40                  45

Phe Thr
     50


<210> 93
<211> 155
<212> PRT
<213> Homo sapiens

<400> 93
Met Trp Pro Gln Glu Ala Trp Val Cys Ile Leu Val Leu Leu Gly Thr
  1               5                  10                  15

Arg Val Gly Leu Cys Val Gly Asp Ser Leu Ala Pro Gln Ala Ser Leu
             20                  25                  30

Ser Tyr Cys Tyr Ile Leu Lys Val Pro Leu Arg Pro Lys Pro Leu Trp
         35                  40                  45
```

```
Gln Leu Ser Asn Glu Ser Ile Cys Ser Glu Tyr Arg Val Glu Gly Gly
     50                  55                  60

Gln Gly His Gln Glu Leu Arg Met Phe Leu Arg Leu Met Arg Pro Arg
 65                  70                  75                  80

Tyr Trp Val His Gly Gly Pro Arg Ser Leu Cys Asp Ser Cys Ser Leu
                85                  90                  95

Leu Pro Pro Cys Leu Asp Pro Ala Ser Ala Gln Lys Ala Asn Ser Leu
            100                 105                 110

Asp Ser Lys Gly Leu Pro Arg Pro Ile Ser Met Ser Cys Ser Cys Gln
        115                 120                 125

Leu Pro Val Pro Ser Leu Asp Leu Ser Ser Cys Leu Ala Pro Ser Leu
    130                 135                 140

Pro Thr Pro His Ile Phe Thr Asn Lys Arg Lys
145                 150                 155


<210> 94
<211> 60
<212> PRT
<213> Homo sapiens

<400> 94
Met Ser His His Ala Arg Pro Tyr Lys Ala Phe Arg Ile Val Ser Cys
  1               5                  10                  15

Tyr Phe Tyr Leu Phe Ile Ile Val Val Val Ile Ile Leu Leu Leu Tyr
            20                  25                  30

Pro Ile Ser Gln Gly Trp His Val Ala Asn Ile Val Phe Leu Lys Asn
        35                  40                  45

Ile Ser Asp His Ile Leu Val Leu Leu Lys Thr Phe
     50                  55                  60


<210> 95
<211> 70
<212> PRT
<213> Homo sapiens

<400> 95
Met Trp Phe Glu Ile Leu Pro Gly Leu Ser Val Met Gly Val Cys Leu
  1               5                  10                  15

Leu Ile Pro Gly Leu Ala Thr Ala Tyr Ile His Arg Phe Thr Asn Gly
            20                  25                  30

Gly Lys Glu Lys Arg Val Ala His Phe Gly Tyr His Trp Ser Leu Met
        35                  40                  45

Glu Arg Asp Arg Arg Ile Ser Gly Val Asp Arg Tyr Tyr Val Ser Lys
     50                  55                  60
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Gly Leu Glu Asn Ile Asp
 65                  70


<210> 96
<211> 36
<212> PRT
<213> Homo sapiens

<400> 96
Met Val Phe Leu Leu Leu Leu Phe Gly Phe Phe Phe Asp Gly Ser
  1               5                  10                  15

Leu Arg Ser Pro Leu Leu Leu Ile Ile His Leu Gly Pro Ala Pro Thr
             20                  25                  30

Phe Leu Gln Ile
         35


<210> 97
<211> 59
<212> PRT
<213> Homo sapiens

<400> 97
Met Leu Cys Gln Thr Ile Pro Leu Cys Asn Arg Leu His Ile Val Phe
  1               5                  10                  15

Met Ile Leu Ile Lys Leu Tyr Val Glu Thr Glu Cys Glu Val Lys Ser
             20                  25                  30

Glu His Lys Lys Ile Met His Asp Glu Ile Ala Tyr His Phe Ile Gly
         35                  40                  45

Tyr Leu Leu Cys Ile Tyr Thr Leu Arg Pro Leu
     50                  55


<210> 98
<211> 43
<212> PRT
<213> Homo sapiens

<400> 98
Met Ser Val Ser Ser Asn Leu Trp Gln Thr Leu Ile Leu Leu Leu Ser
  1               5                  10                  15

Leu Trp Phe Cys Leu Phe Pro Glu Cys His Ile Val Gly Ile Ile Gln
             20                  25                  30

Leu Cys Arg Leu Phe Arg Leu Pro Ser Phe Thr
         35                  40


<210> 99
<211> 31
```

<212> PRT
<213> Homo sapiens

<400> 99
Met Cys Cys Arg Ala Gly Gly Ser Gln Ser Pro Gln Val Met Val Val
1 5 10 15

Leu Ile Ile Ile Leu Gly Pro Trp Gly Gly Val Arg Ile Asp Ala
20 25 30

<210> 100
<211> 180
<212> PRT
<213> Homo sapiens

<400> 100
Met Tyr Ser Cys Leu Leu Leu Pro Asp Leu Leu Tyr Leu Thr Leu Ser
1 5 10 15

Pro Leu Val Val Ala Met Leu Leu Thr Pro His Phe Asn Val Ala Asn
20 25 30

Pro Gln Asn Leu Leu Ala Gly Leu Trp Leu Glu Asn Glu His Ser Phe
35 40 45

Thr Leu Met Ala Pro Glu Arg Ala Arg Thr His His Cys Gln Pro Glu
50 55 60

Glu Arg Lys Val Leu Phe Cys Leu Phe Pro Ile Val Pro Asn Ser Gln
65 70 75 80

Ala Gln Val Gln Pro Pro Gln Met Pro Pro Phe Cys Cys Ala Ala Ala
85 90 95

Lys Glu Lys Thr Gln Glu Glu Gln Leu Gln Glu Pro Leu Gly Ser Gln
100 105 110

Cys Pro Asp Thr Cys Pro Asn Ser Leu Cys Pro Ser His Thr Gln Leu
115 120 125

Thr Lys Ala Asn Thr Leu Ser Leu Phe Phe Phe Phe Ser Phe Phe Leu
130 135 140

Ser Arg Val Ser Leu Leu Ser Pro Arg Leu Glu Cys Asn Gly Arg Ile
145 150 155 160

Leu Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Asn Ser Pro Val
165 170 175

Ser Ala Ser Arg
180

<210> 101

<211> 211
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 101

```
Met Arg Leu Phe Leu Trp Asn Ala Val Leu Thr Leu Phe Val Thr Ser
  1               5                  10                  15

Leu Ile Gly Ala Leu Ile Pro Glu Pro Glu Val Lys Ile Glu Val Leu
            20                  25                  30

Gln Lys Pro Phe Ile Cys His Arg Lys Thr Lys Gly Xaa Asp Leu Met
        35                  40                  45

Leu Val His Tyr Glu Gly Tyr Leu Glu Lys Asp Gly Ser Leu Phe His
    50                  55                  60

Ser Thr His Lys His Asn Asn Gly Gln Pro Ile Trp Phe Thr Leu Gly
65                  70                  75                  80

Ile Leu Glu Ala Leu Lys Gly Trp Asp Gln Gly Leu Lys Gly Met Cys
                85                  90                  95

Val Gly Glu Lys Arg Lys Leu Ile Ile Pro Pro Ala Leu Gly Tyr Gly
            100                 105                 110

Lys Glu Gly Lys Gly Lys Ile Pro Pro Glu Ser Thr Leu Ile Phe Asn
        115                 120                 125

Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe
    130                 135                 140

Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val
145                 150                 155                 160

Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn
                165                 170                 175

Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp
            180                 185                 190

Glu Asp Xaa Tyr Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His
        195                 200                 205

Asp Glu Leu
    210
```

<210> 102
<211> 621
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 102
Met Gly Leu Leu Ser Asp Pro Val Arg Arg Arg Ala Leu Ala Arg Leu
1 5 10 15

Val Leu Arg Leu Asn Ala Pro Leu Cys Val Leu Ser Tyr Val Ala Gly
20 25 30

Ile Ala Trp Phe Leu Ala Leu Val Phe Pro Pro Leu Thr Gln Arg Thr
35 40 45

Tyr Met Ser Glu Asn Ala Met Gly Ser Thr Met Val Glu Glu Gln Phe
50 55 60

Ala Gly Gly Asp Arg Ala Arg Ala Phe Ala Arg Asp Phe Ala Ala His
65 70 75 80

Arg Lys Lys Ser Gly Ala Leu Pro Val Ala Trp Leu Glu Arg Thr Met
85 90 95

Arg Ser Val Gly Leu Glu Val Tyr Thr Gln Ser Phe Ser Arg Lys Leu
100 105 110

Pro Phe Pro Asp Glu Thr His Glu Arg Tyr Met Val Ser Gly Thr Asn
115 120 125

Val Tyr Gly Ile Leu Arg Ala Pro Xaa Ala Ala Ser Thr Glu Ser Leu
130 135 140

Val Leu Thr Val Pro Cys Gly Ser Asp Ser Thr Asn Ser Gln Ala Val
145 150 155 160

Gly Leu Leu Leu Ala Leu Ala Ala His Phe Arg Gly Gln Ile Tyr Trp
165 170 175

Ala Lys Asp Ile Val Phe Leu Val Thr Glu His Asp Leu Leu Gly Thr
180 185 190

Glu Ala Trp Leu Glu Ala Tyr His Asp Val Asn Val Thr Gly Met Gln
195 200 205

Ser Ser Pro Leu Gln Gly Arg Ala Gly Ala Ile Gln Ala Ala Val Ala
210 215 220

Leu Glu Leu Ser Ser Asp Val Val Thr Ser Leu Asp Val Ala Val Glu
225 230 235 240

Gly Leu Asn Gly Gln Leu Pro Asn Leu Asp Leu Leu Asn Leu Phe Gln
245 250 255

```
Thr Phe Cys Gln Lys Gly Gly Leu Leu Cys Thr Leu Gln Gly Lys Leu
                260                 265                 270

Gln Pro Glu Asp Trp Thr Ser Leu Asp Gly Pro Leu Gln Gly Leu Gln
        275                 280                 285

Thr Leu Leu Leu Met Val Leu Arg Gln Ala Ser Gly Arg Pro His Gly
    290                 295                 300

Ser His Gly Leu Phe Leu Arg Tyr Arg Val Glu Ala Leu Thr Leu Arg
305                 310                 315                 320

Gly Ile Asn Ser Phe Arg Gln Tyr Lys Tyr Asp Leu Val Ala Val Gly
                325                 330                 335

Lys Ala Leu Glu Gly Met Phe Arg Lys Leu Asn His Leu Leu Glu Arg
            340                 345                 350

Leu His Gln Ser Phe Phe Leu Tyr Leu Leu Pro Gly Leu Ser Arg Phe
        355                 360                 365

Val Ser Ile Gly Leu Tyr Met Pro Ala Val Gly Phe Leu Leu Leu Val
    370                 375                 380

Leu Gly Leu Lys Ala Leu Glu Leu Trp Met Gln Leu His Glu Ala Gly
385                 390                 395                 400

Met Gly Leu Glu Glu Pro Gly Gly Ala Pro Gly Pro Ser Val Pro Leu
                405                 410                 415

Pro Pro Ser Gln Gly Val Gly Leu Ala Ser Leu Val Ala Pro Leu Leu
            420                 425                 430

Ile Ser Gln Ala Met Gly Leu Ala Leu Tyr Val Leu Pro Val Leu Gly
        435                 440                 445

Gln His Val Ala Thr Gln His Phe Pro Val Ala Glu Ala Glu Ala Val
    450                 455                 460

Val Leu Thr Leu Leu Ala Ile Tyr Ala Ala Gly Leu Ala Leu Pro His
465                 470                 475                 480

Asn Thr His Arg Val Val Ser Thr Gln Ala Pro Asp Arg Gly Trp Met
                485                 490                 495

Ala Leu Lys Leu Val Ala Leu Ile Tyr Leu Ala Leu Gln Leu Gly Cys
            500                 505                 510

Ile Ala Leu Thr Asn Phe Ser Leu Gly Phe Leu Leu Ala Thr Thr Met
        515                 520                 525

Val Pro Thr Ala Ala Leu Ala Lys Pro His Gly Pro Arg Thr Leu Tyr
    530                 535                 540

Ala Ala Leu Leu Val Leu Thr Ser Pro Ala Ala Thr Leu Leu Gly Ser
545                 550                 555                 560
```

```
Leu Phe Leu Trp Arg Glu Leu Gln Glu Ala Pro Leu Ser Leu Ala Glu
                565                 570                 575

Gly Trp Gln Leu Phe Leu Ala Ala Leu Ala Gln Gly Val Leu Glu His
            580                 585                 590

His Thr Tyr Gly Ala Leu Leu Phe Pro Leu Leu Ser Leu Gly Leu Tyr
        595                 600                 605

Pro Cys Trp Leu Leu Phe Trp Asn Val Leu Phe Trp Lys
    610                 615                 620


<210> 103
<211> 287
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (263)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 103
Met Ala Leu Leu Pro Ile Phe Phe Gly Ala Leu Arg Ser Val Arg Cys
  1               5                  10                  15

Ala Arg Gly Lys Asn Ala Ser Asp Met Pro Glu Thr Ile Thr Ser Arg
            20                  25                  30

Asp Ala Ala Arg Phe Pro Ile Ile Ala Ser Cys Thr Leu Leu Gly Leu
        35                  40                  45

Tyr Leu Phe Phe Lys Ile Phe Ser Gln Glu Tyr Ile Asn Leu Leu Leu
    50                  55                  60

Ser Met Tyr Phe Phe Val Leu Gly Ile Leu Ala Leu Ser His Thr Ile
65                  70                  75                  80

Ser Pro Phe Met Asn Lys Phe Phe Pro Ala Ser Phe Pro Asn Arg Gln
                85                  90                  95

Tyr Gln Leu Leu Phe Thr Gln Gly Ser Gly Glu Asn Lys Glu Glu Ile
            100                 105                 110

Ile Asn Tyr Glu Phe Asp Thr Lys Asp Leu Val Cys Leu Gly Leu Ser
        115                 120                 125

Ser Ile Val Gly Val Trp Tyr Leu Leu Arg Lys His Trp Ile Ala Asn
    130                 135                 140

Asn Leu Phe Gly Leu Ala Phe Ser Leu Asn Gly Val Glu Leu Leu His
145                 150                 155                 160

Leu Asn Asn Val Ser Thr Gly Cys Ile Leu Leu Gly Gly Leu Phe Ile
                165                 170                 175

Tyr Asp Val Phe Trp Val Phe Gly Thr Asn Val Met Val Thr Val Ala
```

```
            180                 185                 190

Lys Ser Phe Glu Ala Pro Ile Lys Leu Val Phe Pro Gln Asp Leu Leu
        195                 200                 205

Glu Lys Gly Leu Glu Ala Asn Asn Phe Ala Met Leu Gly Leu Gly Asp
    210                 215                 220

Val Val Ile Pro Gly Ile Phe Ile Ala Leu Leu Leu Arg Phe Asp Ile
225                 230                 235                 240

Ser Leu Lys Lys Asn Thr His Thr Tyr Phe Tyr Thr Ser Phe Ala Ala
                245                 250                 255

Tyr Ile Phe Gly Leu Gly Xaa Tyr His Leu His His Ala His Leu Gln
            260                 265                 270

Ala Cys Ser Val Met Arg Ser Gln Ile Leu Arg Ile Gln Arg Gln
        275                 280                 285


<210> 104
<211> 31
<212> PRT
<213> Homo sapiens

<400> 104
Met Ser Arg Leu Leu Leu Leu Phe Gly Arg Leu Cys Ser Leu Trp Cys
  1               5                  10                  15

Leu Ser Trp Leu Tyr Ser Thr Asp Thr Arg Pro Leu Leu Arg Gly
             20                  25                  30




<210> 105
<211> 77
<212> PRT
<213> Homo sapiens

<400> 105
Met Leu Pro Arg Leu Val Leu Asn Ser Trp Ala Cys Pro Pro Gln Pro
  1               5                  10                  15

Pro Lys Val Leu Glu Leu Gln Ala Cys Ala Thr Ile Ser Ser Leu Ile
             20                  25                  30

Thr Leu Phe Leu Met Phe Ile Lys Ser Ser His Pro Leu Ser Leu Ala
        35                  40                  45

Glu Ala Ser Gln Glu Gly Gln Asn Gln Leu Gln Ser Thr Ile Ser Asp
    50                  55                  60

Pro Glu Thr Trp Ile Leu Phe Val His Leu Asn Val Thr
65                  70                  75
```

<210> 106
<211> 44
<212> PRT
<213> Homo sapiens

<400> 106
Met Val Phe Leu Val Phe Tyr Val Leu Arg Ala Leu Lys Cys Asn Ser
1 5 10 15

Ser Tyr His Ser Cys Thr Asn Val Leu Thr Gln Ile Ala Ser Gln Ile
20 25 30

Asp Lys Thr Leu Asn Asn Phe Ser Leu Lys Lys Cys
35 40

<210> 107
<211> 41
<212> PRT
<213> Homo sapiens

<400> 107
Met Asn Pro Cys Leu Ser Ile Ile Phe Leu Leu Thr Pro Val Leu Leu
1 5 10 15

Ser His Pro Leu Gln Ser Leu His Phe Leu Leu Lys Val Asp Leu Asp
20 25 30

Phe Ser Leu Ser Cys Ser Ile Cys Thr
35 40

<210> 108
<211> 69
<212> PRT
<213> Homo sapiens

<400> 108
Met Thr Val Tyr Leu Leu Lys Thr His Pro Cys Phe Phe Val Ala Tyr
1 5 10 15

Gln Met Gln Val Ala Leu Ile Ile Leu Leu Pro Gly Leu Arg Asn Ser
20 25 30

Lys Thr Val Thr Met Pro Leu Ser Pro Ala Leu Leu Pro Thr Leu Leu
35 40 45

Phe Phe Pro Ser Pro Thr Pro Phe Phe His Pro Phe Leu Ser Val Leu
50 55 60

Cys Cys Phe Lys Tyr
65

<210> 109
<211> 48
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 109
Met His Ala Thr Cys Thr Arg Thr Trp Arg Ala Gln Val Ser Leu His
1 5 10 15

Gln Pro Pro Cys Ser Arg Asp Trp Lys Ile Cys His Leu Leu Val Val
20 25 30

Leu Ser Leu Pro Pro Pro Thr Pro Ala Arg Xaa Pro Glu Phe Leu Asn
35 40 45

<210> 110
<211> 192
<212> PRT
<213> Homo sapiens

<400> 110
Met Ile Arg Asn Asp Gln Asp Ser Leu Met Gln Leu Leu Gln Leu Gly
1 5 10 15

Leu Val Val Leu Gly Ser Gln Glu Ser Gln Glu Ser Asp Leu Ser Lys
20 25 30

Gln Leu Ile Ser Val Ile Ile Gly Leu Gly Val Ala Leu Leu Leu Val
35 40 45

Leu Val Ile Met Thr Met Ala Phe Val Cys Val Arg Lys Ser Tyr Asn
50 55 60

Arg Lys Leu Gln Ala Met Lys Ala Ala Lys Glu Ala Arg Lys Thr Ala
65 70 75 80

Ala Gly Val Met Pro Ser Ala Pro Ala Ile Pro Gly Thr Asn Met Tyr
85 90 95

Asn Thr Glu Arg Ala Asn Pro Met Leu Asn Leu Pro Asn Lys Asp Leu
100 105 110

Gly Leu Glu Tyr Leu Ser Pro Ser Asn Asp Leu Asp Ser Val Ser Val
115 120 125

Asn Ser Leu Asp Asp Asn Ser Val Asp Val Asp Lys Asn Ser Gln Glu
130 135 140

Ile Lys Glu His Arg Pro Pro His Thr Pro Pro Glu Pro Asp Pro Glu
145 150 155 160

Pro Leu Ser Val Val Leu Leu Gly Arg Gln Ala Gly Ala Ser Gly Gln
165 170 175

Leu Glu Gly Pro Ser Tyr Thr Asn Ala Gly Leu Asp Thr Thr Asp Leu
180 185 190

<210> 111
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 111
Met Ala His Val Val Val Ala Arg Asn Glu Cys Leu Ile Arg Ala Phe
1 5 10 15

Leu Phe Leu Leu His Cys Val Ser Leu Leu Pro Ser Pro Gly Glu Val
20 25 30

Asn Ile Arg His Thr Leu Phe Thr Val Glu Glu Arg Leu Thr Thr Pro
35 40 45

Arg Ala Leu Lys Leu Ser Leu Ser Leu Ile Val Ser Leu His Ala Xaa
50 55 60

Cys Arg Lys Gln Glu Cys Ser
65 70

<210> 112
<211> 35
<212> PRT
<213> Homo sapiens

<400> 112
Met Arg Leu Thr Glu Lys Asp Thr Val Leu Phe Thr Lys Gly Val Leu
1 5 10 15

Phe Leu His Leu Phe Ile Asn Ala Leu Phe Trp Tyr Cys Lys Phe Gly
20 25 30

His Asn Phe
35

<210> 113
<211> 59
<212> PRT
<213> Homo sapiens

<400> 113
Met Thr Ser Val Ser Thr Gln Leu Ser Leu Val Leu Met Ser Leu Leu
1 5 10 15

Leu Val Leu Pro Val Val Glu Ala Val Glu Ala Gly Asp Ala Ile Ala

20 25 30

Leu Leu Leu Gly Val Val Leu Ser Ile Thr Gly Ile Cys Ala Cys Leu
35 40 45

Gly Val Tyr Ala Arg Lys Arg Asn Gly Gln Met
50 55

<210> 114
<211> 28
<212> PRT
<213> Homo sapiens

<400> 114
Met Asn Ser Phe Trp Ser Lys Leu Leu Val Leu Pro Leu Leu Ala Pro
1 5 10 15

Leu Ser Met Ala Arg Ala Ser Ala Cys Gln Arg Trp
20 25

<210> 115
<211> 24
<212> PRT
<213> Homo sapiens

<400> 115
Met Met Arg Leu Leu Asp Leu Arg Ile Phe Leu Met Ile His His Lys
1 5 10 15

Ala Lys Ser Trp Glu Ser His Thr
20

<210> 116
<211> 34
<212> PRT
<213> Homo sapiens

<400> 116
Met Pro Leu Ser Leu Leu Leu Ile Val Trp Lys Leu Glu Leu Cys Val
1 5 10 15

Gly Ser Ala Leu Val Leu Ile His Thr Gln Arg Arg Tyr Ile Ile Leu
20 25 30

Gln Val

<210> 117
<211> 77
<212> PRT
<213> Homo sapiens

<400> 117
Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala

```
 1               5                  10                  15

His Pro Asp Arg Ile Ile Phe Pro Asn His Ala Cys Glu Asp Pro Pro
            20                  25                  30

Ala Val Leu Leu Glu Val Gln Gly Thr Leu Gln Arg Pro Leu Val Arg
        35                  40                  45

Asp Ser Arg Thr Ser Pro Ala Asn Cys Thr Trp Leu Thr Lys Arg Val
    50                  55                  60

Gln Gln Met Leu Leu Phe His Ser Tyr Gly Ile Ala Gln
65                  70                  75
```

<210> 118
<211> 43
<212> PRT
<213> Homo sapiens

<400> 118

```
Met Thr Gly Val Phe Lys Leu Pro Leu Leu Phe Trp Val His Glu Ala
  1               5                  10                  15

Ser Val Gly Gly Cys Pro Tyr Val Lys Leu Val Glu Phe Glu Glu Met
            20                  25                  30

Leu Thr Leu Tyr Gly Ile Leu Leu Ile Leu Phe
        35                  40
```

<210> 119
<211> 45
<212> PRT
<213> Homo sapiens

<400> 119

```
Met Gln Leu Ala Pro Phe Ile Ser Ile Pro Val Leu Ser Gly Thr Thr
  1               5                  10                  15

Pro Trp Thr Ala Val Phe Arg Ala Ser Ser Ile Cys Thr Pro Leu Leu
            20                  25                  30

Thr Leu Ser Ala Ala Gly Met Leu Val Glu Ser Ser Leu
        35                  40                  45
```

<210> 120
<211> 28
<212> PRT
<213> Homo sapiens

<400> 120

```
Met Pro Pro Leu Ser Asp Ile Leu Leu Thr Val Ala Val Val Ala Phe
  1               5                  10                  15

Glu Met Thr Gly His Ile Tyr Ile Trp Pro His Thr
            20                  25
```

<210> 121
<211> 62
<212> PRT
<213> Homo sapiens

<400> 121
Met Glu Leu Pro Cys Asp Cys Ser Lys Leu Leu Tyr Cys Lys Phe Ser
1 5 10 15

Val Trp His Leu Pro Val Asn Ala Met Lys Leu Leu Ile Ile Phe Leu
20 25 30

Lys Val Leu His Cys Leu Phe Phe Leu Leu Leu Cys Lys Phe Leu Tyr
35 40 45

Thr Leu Ile Val Ile Leu Thr Asp Lys Tyr Ser Ile Leu Asn
50 55 60

<210> 122
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 122
Met Pro Val Ser Trp Gly Cys Pro Ser Lys Thr Pro Gln Thr Arg Ala
1 5 10 15

Tyr Thr Arg Cys Val Tyr Phe Leu Met Val Leu Glu Ala Gly Val Gly
20 25 30

Gly His Ser Val Ser Arg Val Gly Ser Leu Glu Val Pro Pro Trp Leu
35 40 45

Val Ala Ala Asn Asn Phe Pro His Leu Met Trp Ser Ser Phe Cys Val
50 55 60

Gly Pro His Xaa Val Phe Leu Xaa Asp Pro Ser Leu Pro Asp Pro Gly
65 70 75 80

Pro Pro Asn Asn Leu Thr
85

<210> 123
<211> 63

<212> PRT
<213> Homo sapiens

<400> 123
Met Cys Tyr Phe Leu Glu Ile Ser Leu Leu Met Val Phe Ala Leu Asn
1 5 10 15

Ile Lys Ala Ala Tyr Gly Cys Cys Asn Ile Asn Gly Thr Glu Val His
20 25 30

Arg Ala Lys Gly Pro Val Ser Val Pro Phe Pro Leu Ser Arg Pro Leu
35 40 45

Ser Gly Thr Pro Leu Leu Asp Arg Leu Arg Pro Phe Gln Thr Leu
50 55 60

<210> 124
<211> 35
<212> PRT
<213> Homo sapiens

<400> 124
Met Pro Leu Pro Ser Ser Phe Pro Leu Pro Val Phe Leu Ser Ser Cys
1 5 10 15

Pro Phe Leu Met Ser Val Ser Ile Gly Phe Leu Ile Leu Val Phe Asn
20 25 30

Val His Pro
35

<210> 125
<211> 31
<212> PRT
<213> Homo sapiens

<400> 125
Met Phe Ile Phe Cys Val Ser Leu Ala Phe Leu Pro Arg Phe Ile Ser
1 5 10 15

Pro Gln Ser Cys Glu Trp Ala Gly Leu Ser Leu Val Trp His His
20 25 30

<210> 126
<211> 40
<212> PRT
<213> Homo sapiens

<400> 126
Met Lys Asn Asn Thr Gln Lys Arg Leu Phe Leu Trp Gly Glu Leu Leu
1 5 10 15

```
Leu Gln Asp Leu Ala Leu Ile Leu Tyr Leu Ser Ile Phe Leu Lys Ser
            20                  25                  30

Thr Leu Thr Asn Leu Asn Leu Phe
        35                  40


<210> 127
<211> 27
<212> PRT
<213> Homo sapiens

<400> 127
Met Leu Asn Val Phe Phe Ser Leu Ile Leu Phe Phe Ser Pro Asn Arg
  1               5                  10                  15

Ala Leu Pro Ala Ile Ser Ser Cys Ile Thr Phe
            20                  25


<210> 128
<211> 68
<212> PRT
<213> Homo sapiens

<400> 128
Met Arg Ala Val Gly Glu Arg Leu Leu Leu Lys Leu Gln Arg Leu Pro
  1               5                  10                  15

Gln Ala Glu Pro Val Glu Ile Val Ala Phe Ser Val Ile Ile Leu Phe
            20                  25                  30

Thr Ala Thr Val Leu Leu Leu Leu Leu Ile Ala Cys Ser Cys Cys Cys
        35                  40                  45

Thr His Cys Cys Cys Pro Glu Arg Arg Gly Arg Lys Val Gln Val Gln
    50                  55                  60

Pro Thr Pro Pro
65


<210> 129
<211> 87
<212> PRT
<213> Homo sapiens

<400> 129
Met Asp Pro Arg Arg Val Thr Ala Cys Cys His Val Trp Thr Val Gly
  1               5                  10                  15

Leu Phe Cys Ile Trp Ala Val Gly Leu Ser Cys Ser Leu Ser Leu Ser
            20                  25                  30

His Val Ile Val Trp Leu Ser Gly Ala Gly Cys Thr Leu Ile Cys Glu
        35                  40                  45
```

```
Asp Asn Pro Phe Leu Leu Leu Phe Ser Gln Tyr Leu Gln Pro His His
     50                  55                  60

Pro Glu Ile Met Lys Pro Phe Ile Leu Gly His Lys Ser Ser Asn Gly
 65                  70                  75                  80

Gly Leu Ser Pro Pro Ser Ala
                 85
```

<210> 130
<211> 63
<212> PRT
<213> Homo sapiens

<400> 130

```
Met Phe Tyr Met Val Cys Val Leu Gly Ser Gly Ala Gln Pro Leu Ser
  1               5                  10                  15

Glu Leu Ala Tyr Leu Ala Lys Leu Pro Thr Leu Gln Val Gly Lys Tyr
            20                  25                  30

Asn Pro Leu Phe Asn Lys Ala His Pro Leu His Pro Val Leu Thr Thr
        35                  40                  45

Phe Cys Glu Cys Ala Val Ile Phe Ser Cys Ser Ile Ala Arg Trp
     50                  55                  60
```

<210> 131
<211> 54
<212> PRT
<213> Homo sapiens

<400> 131

```
Met Arg Phe Gln Ser Tyr Leu Trp Pro Ser Arg Ile Leu Val Gly Thr
  1               5                  10                  15

Tyr Cys Ile Ala Ala Glu Val Leu Phe Pro Ser Ala Leu Ala Ser Cys
            20                  25                  30

Gly Pro Val Trp Gln Gly Gly Ala Pro Thr Lys Ser Trp Gln Pro Gly
        35                  40                  45

Ala Lys Thr Ile Ile Pro
     50
```

<210> 132
<211> 40
<212> PRT
<213> Homo sapiens

<400> 132

```
Met Arg Arg Trp Ala Gly Phe Gly Lys Ser Pro Gln Phe Trp Trp Thr
```

```
 1               5                  10                  15

Gly Ile Leu Val Ala Leu Gly Ala Ala Leu Leu Gly Gly Pro Arg Leu
            20                  25                  30

Gly Arg Arg Leu Thr Phe Gly Leu
        35                  40
```

<210> 133
<211> 68
<212> PRT
<213> Homo sapiens

<400> 133

```
Met Ala Leu Ala Ile Phe Ile Pro Val Leu Ile Ile Ser Leu Leu Leu
  1               5                  10                  15

Gly Gly Ala Tyr Ile Tyr Ile Thr Arg Cys Arg Tyr Tyr Ser Asn Leu
            20                  25                  30

Arg Leu Pro Leu Met Tyr Ser His Pro Tyr Ser Gln Ile Thr Val Glu
        35                  40                  45

Thr Glu Phe Asp Asn Pro Ile Tyr Glu Thr Gly Glu Thr Arg Glu Tyr
    50                  55                  60

Glu Val Ser Ile
65
```

<210> 134
<211> 47
<212> PRT
<213> Homo sapiens

<400> 134

```
Met Gly Phe Leu Phe Leu His Ile Leu Pro Ser Ile Ile Asn Thr Arg
  1               5                  10                  15

Ser Ala Pro Gln Pro Thr Ser Cys Arg Met Gln Pro Glu Gln Gln Pro
            20                  25                  30

His Ser Thr Leu Lys Pro Val Ile Leu Gly Met Met Ile Ile Ser
        35                  40                  45
```

<210> 135
<211> 76
<212> PRT
<213> Homo sapiens

<400> 135

```
Met Ser Gly Leu Val Gly Gly Gly Ser Arg Cys Ser Lys Val Arg Phe
  1               5                  10                  15
```

```
Arg Cys Phe Asn Gly Asp Ser Leu Leu Val Leu Val Leu Gln His His
            20                  25                  30

Phe Arg Leu Cys Ser Trp Cys Leu Ala Pro Ser Leu Phe Leu Leu Leu
        35                  40                  45

Ser Cys Gln Val Val Ser Thr Met Met Glu Gln Asp Pro Val Ile Tyr
    50                  55                  60

Asp Asp Asp Asp Asp Leu Pro Asn Tyr Phe Ser Val
65                  70                  75
```

<210> 136
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 136
Met Phe Leu Glu Leu Pro Met Gln His Ser Asp Val Leu Leu Phe Leu
  1               5                  10                  15

Val Cys Trp Lys Ala Met Gly Ser Lys Lys Ser Pro Ser His Phe Xaa
            20                  25                  30

Pro Glu Val Gly Gly Ile Xaa Pro Ser Phe Gly Met Leu Asn Val Thr
        35                  40                  45

Leu Leu Arg Ser Leu Thr
    50
```

<210> 137
<211> 54
<212> PRT
<213> Homo sapiens

```
<400> 137
Met Leu Val Leu Phe Pro Leu Leu Tyr Arg Gly Trp Ser Pro Val Pro
  1               5                  10                  15

Gly Thr Ala Glu Gly Gly Met Cys Cys Cys Cys Leu Cys Ile Ser Arg
            20                  25                  30

Tyr Ser Leu Leu Thr Ser Ser Gln Asp Lys Glu Pro Pro Tyr Glu Met
        35                  40                  45
```

Ser Ser Ser Glu Leu Ser
50

<210> 138
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 138
Met Thr Cys Tyr Glu Val Ile Leu Phe Phe Ile Lys Leu Phe Ser Asp
1 5 10 15

Met Gly Lys Tyr Lys Glu Cys Lys Glu Phe Lys Lys Gln Arg Thr Lys
20 25 30

Xaa Tyr Met
35

<210> 139
<211> 80
<212> PRT
<213> Homo sapiens

<400> 139
Met Lys Ala Gln Pro Leu Glu Ala Leu Leu Leu Val Ala Leu Val Leu
1 5 10 15

Ser Phe Cys Gly Val Trp Phe Glu Asp Trp Leu Ser Lys Trp Arg Phe
20 25 30

Gln Cys Ile Phe Gln Leu Ala His Gln Pro Ala Leu Val Asn Ile Gln
35 40 45

Phe Arg Gly Thr Val Leu Gly Ser Glu Thr Phe Leu Gly Ala Glu Glu
50 55 60

Asn Ser Ala Asp Val Arg Ser Trp Gln Thr Leu Ser Tyr Phe Glu Leu
65 70 75 80

<210> 140
<211> 67
<212> PRT
<213> Homo sapiens

<400> 140
Met Ala Ala Ser Val Gly Arg Ala Thr Arg Ser Ala Ala Ala His Leu
1 5 10 15

Thr Gln Leu Pro Pro Ala Pro Arg Ala Gln Arg Thr Ser Pro Ala Gln

```
            20                  25                  30

Pro Asp Glu Gly Lys Arg Arg Asp Ala Asp Pro Trp Arg Thr Gly Pro
        35                  40                  45

Thr Val Asn Lys Thr Gly Ser Ile Pro Gly Arg Leu Arg Gly Trp Ala
    50                  55                  60

Arg Ala Glu
65


<210> 141
<211> 50
<212> PRT
<213> Homo sapiens

<400> 141
Met Gly Trp Leu Cys Cys Glu Pro Ser Gly Leu Tyr Asn Leu Glu Lys
  1               5                  10                  15

Gln Tyr Phe Phe Phe Ser Ser Leu Gln Ala Gly Leu Pro Val Ile Val
            20                  25                  30

Ser Ser Gly Cys Thr Lys Ile Ala Tyr Gly Phe Ala Val Tyr Ser Pro
        35                  40                  45

Ser Ser
    50


<210> 142
<211> 54
<212> PRT
<213> Homo sapiens

<400> 142
Met Arg Arg Cys Val Arg His Val Leu Gly Ile Gly Leu Ile Val Leu
  1               5                  10                  15

Lys Asn Leu Tyr Phe His Lys Asn Ser Met Tyr Pro Ser Pro Lys Leu
            20                  25                  30

Ser Ser Phe Gln Glu Ala Phe Leu Phe Phe Phe Leu Ile Leu Lys Asn
        35                  40                  45

Pro Leu Thr Leu Cys Ser
    50


<210> 143
<211> 49
<212> PRT
<213> Homo sapiens

<400> 143
Ile His Pro Ser Arg Ser Thr Leu Ser Ser Gln Leu Val Thr Leu Pro
  1               5                  10                  15
```

```
Leu Phe Glu Leu Val Phe Pro Ile Pro Ser Ser Gln Ser Pro Phe Ser
            20                  25                  30

Leu Asn Tyr Leu Ser Glu Phe Pro Leu Pro Glu His Glu Pro Cys Leu
        35                  40                  45

Glu
```

<210> 144
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 144
Met Thr Cys Cys Cys Leu Leu Cys Lys Leu Gln Gly Ile Phe Phe Phe
  1               5                  10                  15

Ser Phe Asn Ser Ser Val Leu Lys Ser Ile Leu Gly Thr Thr Arg Thr
            20                  25                  30

Leu Ser Ala Pro Trp Ile Gly Val Ser Val Lys Gly Thr Gln Trp Ala
        35                  40                  45

Leu Gly Ser Ala Arg Pro Gly Cys Gly Ser Gln Leu Thr Ser Ser Leu
    50                  55                  60

Gly Gly Leu Arg Gln Val Ile Cys Gln Pro His Leu Gln Lys His Asp
65                  70                  75                  80

Ala Lys Leu Xaa Ser Val
                85
```

<210> 145
<211> 57
<212> PRT
<213> Homo sapiens

```
<400> 145
Met His Lys Cys Asn Thr Val Thr Arg Glu Leu Leu Gln Leu Ser Leu
  1               5                  10                  15

Leu Ile Leu Pro Ser Gln Cys Gly Asn Cys Ala Thr Ser Thr Lys Arg
            20                  25                  30

Gly Pro Arg Leu Leu Lys Tyr Phe Arg Thr Ser Pro Gln Glu Gln Thr
        35                  40                  45

Pro Leu His Leu Asp Ser Asp Cys Ser
    50                  55
```

<210> 146
<211> 87
<212> PRT
<213> Homo sapiens

<400> 146
Met Ser His Cys Ala Arg Pro Leu Phe Phe Glu Thr Phe Phe Ile Leu
1 5 10 15

Leu Ser Pro Arg Leu Lys Cys Ser Gly Thr Asn Thr Val His Tyr Ser
20 25 30

Leu Asp Leu Leu Gly Ser Ser Asn Ser Ala Ser Val Pro Gln Val Gly
35 40 45

Gly Leu Thr Asn Ala Gln His Asp Thr Trp Leu Ile Phe Val Phe Cys
50 55 60

Val Cys Val Cys Glu Pro Leu Arg Arg Pro Trp Ala Ala Phe Leu Ile
65 70 75 80

Ser Val Thr Ser Ser Ile Lys
85

<210> 147
<211> 230
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 147
Met Gly Leu Ala Leu Tyr Val Leu Pro Val Leu Gly Gln His Val Ala
1 5 10 15

Thr Gln His Phe Pro Val Ala Glu Ala Glu Ala Val Val Leu Thr Leu
20 25 30

Leu Ala Ile Tyr Ala Ala Gly Leu Ala Leu Pro His Asn Thr His Arg
35 40 45

Val Val Ser Thr Gln Ala Pro Asp Arg Gly Trp Met Ala Leu Lys Leu
50 55 60

Val Ala Leu Ile Tyr Leu Ala Leu Gln Leu Gly Cys Ile Ala Leu Thr
65 70 75 80

Asn Phe Ser Leu Gly Phe Leu Leu Ala Thr Thr Met Val Pro Thr Ala
85 90 95

Ala Leu Ala Lys Pro His Gly Pro Arg Thr Leu Tyr Ala Ala Leu Leu
100 105 110

```
Val Leu Thr Ser Pro Ala Ala Thr Leu Leu Gly Ser Leu Phe Leu Trp
        115                 120                 125

Arg Glu Leu Gln Glu Ala Pro Leu Ser Leu Ala Glu Gly Trp Gln Leu
    130                 135                 140

Phe Leu Ala Ala Leu Ala Gln Gly Val Leu Glu His His Thr Thr Ala
145                 150                 155                 160

Pro Cys Ser Ser His Cys Cys Pro Trp Ala Ser Thr Pro Ala Gly Cys
                165                 170                 175

Phe Ser Gly Met Cys Ser Ser Gly Ser Glu Ile Cys Leu Ser Gly Leu
            180                 185                 190

Gly Gln Arg Leu Pro Lys Asp Pro Ile Leu Pro Pro Ser Gly Glu Ile
        195                 200                 205

Asn Glu Cys Leu Phe Gln Gln Xaa Lys Lys Lys Lys Lys Lys Lys Lys
    210                 215                 220

Lys Lys Lys Lys Gly Gly
225                 230


<210> 148
<211> 62
<212> PRT
<213> Homo sapiens

<400> 148
Gln Pro Ala Leu Leu Tyr Leu Val Pro Ala Cys Ile Gly Phe Pro Val
  1               5                  10                  15

Leu Val Ala Leu Ala Lys Gly Glu Val Thr Glu Met Phe Ser Tyr Glu
             20                  25                  30

Glu Ser Asn Pro Lys Asp Pro Ala Ala Val Thr Glu Ser Lys Glu Gly
         35                  40                  45

Thr Glu Ala Ser Ala Ser Lys Gly Leu Glu Lys Lys Glu Lys
     50                  55                  60


<210> 149
<211> 17
<212> PRT
<213> Homo sapiens

<400> 149
Gln Leu Ile Leu Ser Leu Leu Arg Gly Phe Cys Lys Thr Glu Arg Val
  1               5                  10                  15

Gly


<210> 150
```

<211> 15
<212> PRT
<213> Homo sapiens

<400> 150
Met Ala Leu Gly Ala Arg Glu Leu Pro Gly Ser Leu Ser Arg Trp
1 5 10 15

<210> 151
<211> 21
<212> PRT
<213> Homo sapiens

<400> 151
Met Tyr Ser Phe Ser Val Leu Glu Ile Thr Cys Phe Ile Leu Phe Leu
1 5 10 15

Trp Pro Ser Trp Val
20

<210> 152
<211> 24
<212> PRT
<213> Homo sapiens

<400> 152
Met Lys Ile Lys Gln Arg Phe Ser Leu Leu Leu Phe His Cys Pro Phe
1 5 10 15

Pro Pro Cys Cys Leu Ser Leu Gly
20

<210> 153
<211> 40
<212> PRT
<213> Homo sapiens

<400> 153
Met Asn Gly Leu Phe Gln Leu Glu Ile Ser His Lys Leu Trp Thr Lys
1 5 10 15

Ser Lys Thr Ser Leu Met Thr Leu Leu Ser Val Met Ala Leu Leu Trp
20 25 30

Lys Ile Leu Trp Ser Arg Ala Ile
35 40

<210> 154
<211> 24
<212> PRT
<213> Homo sapiens

<400> 154
Met Thr Pro Gly Leu Phe Leu Tyr Phe Val Cys Val Cys Val Ser His

```
 1               5                  10                  15

Cys Ala Gly Leu Gly Gln Leu Ser
            20
```

<210> 155
<211> 103
<212> PRT
<213> Homo sapiens

```
<400> 155
Ile Arg His Glu Leu Gly Cys Ser Trp Arg Phe Arg Ala Val Lys Ala
  1               5                  10                  15

Ala Ser Ala Gln Gly Leu Phe Leu Ser Ala Pro Gly Pro Ala Ala Arg
            20                  25                  30

Arg Cys His Gly Val Val Arg Cys Phe Ser Thr Cys Arg Ala Leu Thr
        35                  40                  45

Ala Arg Cys Thr Gly Arg Val Pro Trp Glu Ala Cys Leu Tyr Ser Ser
    50                  55                  60

Glu Pro Pro Leu Thr Glu Thr Val Ala Arg Ser Val Ser Trp Thr Cys
65                  70                  75                  80

Glu Leu Ala Leu Thr Cys Tyr Ala Pro Arg Ala Leu Ser Gly Ala Pro
                85                  90                  95

Val Leu Cys Arg His Asp Val
            100
```

<210> 156
<211> 10
<212> PRT
<213> Homo sapiens

```
<400> 156
Val His Leu Gly Leu Pro Pro Gly Asp Ala
  1               5                  10
```

<210> 157
<211> 18
<212> PRT
<213> Homo sapiens

```
<400> 157
Arg Ala Val Lys Ala Ala Ser Ala Gln Gly Leu Phe Leu Ser Ala Pro
  1               5                  10                  15

Gly Pro
```

<210> 158

<211> 28
<212> PRT
<213> Homo sapiens

<400> 158
Gly Val Val Arg Cys Phe Ser Thr Cys Arg Ala Leu Thr Ala Arg Cys
1 5 10 15

Thr Gly Arg Val Pro Trp Glu Ala Cys Leu Tyr Ser
20 25

<210> 159
<211> 23
<212> PRT
<213> Homo sapiens

<400> 159
Ser Val Ser Trp Thr Cys Glu Leu Ala Leu Thr Cys Tyr Ala Pro Arg
1 5 10 15

Ala Leu Ser Gly Ala Pro Val
20

<210> 160
<211> 13
<212> PRT
<213> Homo sapiens

<400> 160
Asn Ser Ala Arg Ala Lys Thr Lys Glu Thr Phe Gly Gly
1 5 10

<210> 161
<211> 46
<212> PRT
<213> Homo sapiens

<400> 161
Phe Leu Ala Ile His Phe Pro Thr Asp Phe Pro Leu Lys Pro Pro Lys
1 5 10 15

Val Ala Phe Thr Arg Met Tyr Phe Pro Asn Ser Asn Ser Asn Gly Ser
20 25 30

Thr Cys Leu Asp Ile Leu Trp Ser Gln Trp Ser Pro Ala Leu
35 40 45

<210> 162
<211> 23
<212> PRT
<213> Homo sapiens

<400> 162
Leu Lys Pro Pro Lys Val Ala Phe Thr Arg Met Tyr Phe Pro Asn Ser

1 5 10 15

Asn Ser Asn Gly Ser Thr Cys
20

<210> 163
<211> 38
<212> PRT
<213> Homo sapiens

<400> 163
Ala Gly Ile Arg His Glu Gly Thr Thr Pro Cys Phe Cys Lys Gly Leu
1 5 10 15

Glu Asn Ile Tyr Pro Val Pro Phe Leu Phe Ala Phe Val Phe Ile Ile
20 25 30

Leu Ala Asn Tyr Trp Lys
35

<210> 164
<211> 44
<212> PRT
<213> Homo sapiens

<400> 164
His Ser Val Val Thr Val Val Ser Ser Thr Ile Ser Lys Val Leu Phe
1 5 10 15

Ser Ile Cys Ser Pro Leu Tyr Asp Ser Asn Pro His Asp Leu Leu Val
20 25 30

Asn Glu Val Ala Glu Ile Phe Thr Met Ser Ile Ile
35 40

<210> 165
<211> 38
<212> PRT
<213> Homo sapiens

<400> 165
Asn Ser Ala Arg Ala Gly Gln Asp Arg Arg Gly Pro Arg Val Thr Ala
1 5 10 15

Glu Gln Thr Leu Pro Ala Ala Ala Ala Ala Ala Ala Leu Leu Arg Asp
20 25 30

Glu Pro Glu Arg Leu Ala
35

<210> 166
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 166
Leu His His Pro His Xaa Leu Pro Leu Ala Leu Xaa Ile Gln Asn Phe
1 5 10 15

Pro Gln Ser Leu Ala Ala Arg Leu Ser Trp Gly
20 25

<210> 167
<211> 12
<212> PRT
<213> Homo sapiens

<400> 167
Met Ile Leu Val Phe Thr Val Lys Leu Ser Asn Val
1 5 10

<210> 168
<211> 20
<212> PRT
<213> Homo sapiens

<400> 168
Thr Pro Val Ile Thr Val Leu Thr Ile Lys Phe Phe Gln Leu Ser Phe
1 5 10 15

Phe Thr Glu Ile
20

<210> 169
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 169

Gln Val Ala Glu Ser Ile Leu Leu Thr Asp Glu Gln Pro Lys Ala Gly
1 5 10 15

Gln Thr Leu Leu Xaa Ala Leu Pro Ala Pro Xaa Ile Arg Asn Thr Gly
20 25 30

Lys Glu Ile Gly Thr Ala Thr Gln Pro Ser
35 40

<210> 170
<211> 7
<212> PRT
<213> Homo sapiens

<400> 170
Pro Gly Ser His Arg Glu Asp
1 5

<210> 171
<211> 27
<212> PRT
<213> Homo sapiens

<400> 171
Glu His Val Trp Gly Phe Val Trp Val Thr Leu Trp Leu Pro Lys Pro
1 5 10 15

Pro Phe Pro Thr Val Ile Ser Leu Lys Cys Leu
20 25

<210> 172
<211> 8
<212> PRT
<213> Homo sapiens

<400> 172
Ile Arg His Glu Gly Ile Thr Gly
1 5

<210> 173
<211> 9
<212> PRT
<213> Homo sapiens

<400> 173
Gly Phe Gly Leu Gly Asn Gly Ala Glu
1 5

<210> 174
<211> 6
<212> PRT
<213> Homo sapiens

<400> 174
Arg Ile Tyr Met Leu Ile
1 5

<210> 175
<211> 91
<212> PRT
<213> Homo sapiens

<400> 175
Thr His Ile Arg Lys Gln Tyr Ala Ala Val Pro Val Arg Ile Pro Gly
1 5 10 15

Arg Pro Thr Arg Pro Pro Thr Arg Pro His Leu Pro Trp Leu Trp Gly
20 25 30

Gly Ala Ser Met Pro Cys Val Ala Leu Gly Trp Ala Val Ala Pro His
35 40 45

Cys Ser Ser Phe Leu Phe Thr Asn His Ala Ser Leu Leu Val Ser Ser
50 55 60

Asp Glu Ile Thr Trp Ile Ser Trp Leu Pro Val Lys Asp Leu His Ala
65 70 75 80

Tyr Tyr Gly Phe Phe Val Val Val Val Val Trp
85 90

<210> 176
<211> 25
<212> PRT
<213> Homo sapiens

<400> 176
Val Pro Val Arg Ile Pro Gly Arg Pro Thr Arg Pro Pro Thr Arg Pro
1 5 10 15

His Leu Pro Trp Leu Trp Gly Gly Ala
20 25

<210> 177
<211> 24
<212> PRT
<213> Homo sapiens

<400> 177
Val Ala Pro His Cys Ser Ser Phe Leu Phe Thr Asn His Ala Ser Leu
1 5 10 15

Leu Val Ser Ser Asp Glu Ile Thr
20

<210> 178
<211> 6

<212> PRT
<213> Homo sapiens

<400> 178
Met Leu Gln Tyr Leu Asn
1 5

<210> 179
<211> 17
<212> PRT
<213> Homo sapiens

<400> 179
Ile Arg His Glu Val Ser Leu Pro Ser Thr Phe Ser Val Leu His Arg
1 5 10 15

Ile

<210> 180
<211> 13
<212> PRT
<213> Homo sapiens

<400> 180
Arg Ala Arg Glu Gln Trp Gly Ser Gly Trp Ala His Ala
1 5 10

<210> 181
<211> 101
<212> PRT
<213> Homo sapiens

<400> 181
Met Leu Leu Thr Pro His Phe Asn Val Ala Asn Pro Gln Asn Leu Leu
1 5 10 15

Ala Gly Leu Trp Leu Glu Asn Glu His Ser Phe Thr Leu Met Ala Pro
20 25 30

Glu Arg Ala Arg Thr His His Cys Gln Pro Glu Glu Arg Lys Val Leu
35 40 45

Phe Cys Leu Phe Pro Ile Val Pro Asn Ser Gln Ala Gln Val Gln Pro
50 55 60

Pro Gln Met Pro Pro Phe Cys Cys Ala Ala Ala Lys Glu Lys Thr Gln
65 70 75 80

Glu Glu Gln Leu Gln Glu Pro Leu Gly Ser Gln Cys Pro Asp Thr Cys
85 90 95

Pro Asn Ser Leu Cys
100

<210> 182
<211> 85
<212> PRT
<213> Homo sapiens

<400> 182
Arg Met Ser Thr Val Ser Pro Leu Trp Leu Gln Lys Glu Gln Glu His
1 5 10 15

Thr Thr Ala Ser Gln Lys Arg Glu Lys Ser Cys Ser Val Ser Phe Pro
20 25 30

Leu Ser Gln Ile Ala Lys His Arg Phe Asn His Pro Lys Cys His Pro
35 40 45

Ser Ala Val Gln Gln Pro Arg Lys Arg Pro Arg Arg Ser Ser Ser Lys
50 55 60

Asn Leu Trp Ala Val Ser Ala Gln Ile Leu Ala Pro Ile Leu Cys Val
65 70 75 80

Gln Ala Thr Leu Ser
85

<210> 183
<211> 31
<212> PRT
<213> Homo sapiens

<400> 183
Gly Leu Trp Leu Glu Asn Glu His Ser Phe Thr Leu Met Ala Pro Glu
1 5 10 15

Arg Ala Arg Thr His His Cys Gln Pro Glu Glu Arg Lys Val Leu
20 25 30

<210> 184
<211> 21
<212> PRT
<213> Homo sapiens

<400> 184
Glu His Thr Thr Ala Ser Gln Lys Arg Glu Lys Ser Cys Ser Val Ser
1 5 10 15

Phe Pro Leu Ser Gln
20

<210> 185
<211> 122
<212> PRT
<213> Homo sapiens

<400> 185

```
Thr Cys Ala Trp Leu Phe Gly Thr Met Gly Lys Arg Gln Asn Lys Thr
 1               5                  10                  15

Phe Leu Ser Ser Gly Trp Gln Trp Cys Val Leu Ala Leu Ser Gly Ala
            20                  25                  30

Ile Arg Val Lys Leu Cys Ser Phe Ser Ser Gln Arg Pro Ala Asn Arg
        35                  40                  45

Phe Trp Gly Phe Ala Thr Leu Lys Cys Gly Val Asn Ser Ile Ala Thr
    50                  55                  60

Thr Ser Gly Asp Arg Val Lys Tyr Ser Lys Ser Gly Arg Ser Arg Gln
65                  70                  75                  80

Leu Tyr Ile Pro Leu Val Phe Leu Tyr Gly Pro Val Cys Leu Gly Lys
                85                  90                  95

Lys Ser His Ile Leu Leu Lys Gly Ser Asn Tyr Ser Ala Leu Leu Phe
            100                 105                 110

Cys Lys Val Leu Phe Lys Cys Ser Lys Tyr
        115                 120


<210> 186
<211> 25
<212> PRT
<213> Homo sapiens

<400> 186
Lys Arg Gln Asn Lys Thr Phe Leu Ser Ser Gly Trp Gln Trp Cys Val
 1               5                  10                  15

Leu Ala Leu Ser Gly Ala Ile Arg Val
            20                  25


<210> 187
<211> 23
<212> PRT
<213> Homo sapiens

<400> 187
Leu Lys Cys Gly Val Asn Ser Ile Ala Thr Thr Ser Gly Asp Arg Val
 1               5                  10                  15

Lys Tyr Ser Lys Ser Gly Arg
            20


<210> 188
<211> 19
<212> PRT
<213> Homo sapiens

<400> 188
Leu Leu Lys Gly Ser Asn Tyr Ser Ala Leu Leu Phe Cys Lys Val Leu
```

1 5 10 15

Phe Lys Cys

<210> 189
<211> 211
<212> PRT
<213> Homo sapiens

<400> 189
Met Arg Leu Phe Leu Trp Asn Ala Val Leu Thr Leu Phe Val Thr Ser
1 5 10 15

Leu Ile Gly Ala Leu Ile Pro Glu Pro Glu Val Lys Ile Glu Val Leu
20 25 30

Gln Lys Pro Phe Ile Cys His Arg Lys Thr Lys Gly Gly Asp Leu Met
35 40 45

Leu Val His Tyr Glu Gly Tyr Leu Glu Lys Asp Gly Ser Leu Phe His
50 55 60

Ser Thr His Lys His Asn Asn Gly Gln Pro Ile Trp Phe Thr Leu Gly
65 70 75 80

Ile Leu Glu Ala Leu Lys Gly Trp Asp Gln Gly Leu Lys Gly Met Cys
85 90 95

Val Gly Glu Lys Arg Lys Leu Ile Ile Pro Pro Ala Leu Gly Tyr Gly
100 105 110

Lys Glu Gly Lys Gly Lys Ile Pro Pro Glu Ser Thr Leu Ile Phe Asn
115 120 125

Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe
130 135 140

Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val
145 150 155 160

Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn
165 170 175

Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp
180 185 190

Glu Asp Lys Asp Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His
195 200 205

Asp Glu Leu
210

<210> 190
<211> 186
<212> PRT

<213> Homo sapiens

<400> 190

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Glu Val Lys Ile Glu Val Leu Gln Lys Pro Phe Ile Cys His Arg Lys
  1               5                  10                  15

Thr Lys Gly Gly Asp Leu Met Leu Val His Tyr Glu Gly Tyr Leu Glu
            20                  25                  30

Lys Asp Gly Ser Leu Phe His Ser Thr His Lys His Asn Asn Gly Gln
        35                  40                  45

Pro Ile Trp Phe Thr Leu Gly Ile Leu Glu Ala Leu Lys Gly Trp Asp
    50                  55                  60

Gln Gly Leu Lys Gly Met Cys Val Gly Glu Lys Arg Lys Leu Ile Ile
65                  70                  75                  80

Pro Pro Ala Leu Gly Tyr Gly Lys Glu Gly Lys Gly Lys Ile Pro Pro
                85                  90                  95

Glu Ser Thr Leu Ile Phe Asn Ile Asp Leu Leu Glu Ile Arg Asn Gly
            100                 105                 110

Pro Arg Ser His Glu Ser Phe Gln Glu Met Asp Leu Asn Asp Asp Trp
        115                 120                 125

Lys Leu Ser Lys Asp Glu Val Lys Ala Tyr Leu Lys Lys Glu Phe Glu
    130                 135                 140

Lys His Gly Ala Val Val Asn Glu Ser His His Asp Ala Leu Val Glu
145                 150                 155                 160

Asp Ile Phe Asp Lys Glu Asp Glu Asp Lys Asp Gly Phe Ile Ser Ala
                165                 170                 175

Arg Glu Phe Thr Tyr Lys His Asp Glu Leu
            180                 185
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<210> 191
<211> 633
<212> DNA
<213> Homo sapiens

<400> 191

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ATGAGGCTTT TCTTGTGGAA CGCGGTCTTG ACTCTGTTCG TCACTTCTTT GATTGGGGCT      60

TTGATCCCTG AACCAGAAGT GAAAATTGAA GTTCTCCAGA AGCCATTCAT CTGCCATCGC     120

AAGACCAAAG GAGGGGATTT GATGTTGGTC CACTATGAAG GCTACTTAGA AAAGGACGGC     180

TCCTTATTTC ACTCCACTCA CAAACATAAC AATGGTCAGC CCATTTGGTT TACCCTGGGC     240

ATCCTGGAGG CTCTCAAAGG TTGGGACCAG GGCTTGAAAG GAATGTGTGT AGGAGAGAAG     300

AGAAAGCTCA TCATTCCTCC TGCTCTGGGC TATGGAAAAG AAGGAAAAGG TAAAATTCCC     360
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CCAGAAAGTA CACTGATATT TAATATTGAT CTCCTGGAGA TTCGAAATGG ACCAAGATCC 420

CATGAATCAT TCCAAGAAAT GGATCTTAAT GATGACTGGA AACTCTCTAA AGATGAGGTT 480

AAAGCATATT TAAAGAAGGA GTTTGAAAAA CATGGTGCGG TGGTGAATGA AAGTCATCAT 540

GATGCTTTGG TGGAGGATAT TTTTGATAAA GAAGATGAAG ACAAAGATGG GTTTATATCT 600

GCCAGAGAAT TTACATATAA ACACGATGAG TTA 633

<210> 192
<211> 18
<212> PRT
<213> Homo sapiens

<400> 192
Ser Arg Gly Thr Phe Arg Cys Phe Cys Arg Asp Phe Phe Pro Cys Phe
1 5 10 15

Ser Asn

<210> 193
<211> 25
<212> PRT
<213> Homo sapiens

<400> 193
Gln Glu Gln Pro Val Gly Thr Ala Ala Val Val Gly Gly Gly Arg Gly
1 5 10 15

Ser Val Ala Ala Pro Pro Cys Pro Ala
20 25

<210> 194
<211> 72
<212> PRT
<213> Homo sapiens

<400> 194
Gly Asn Val Ala Phe Pro Ala Glu Pro Val Ser Pro Pro Ala Ser Leu
1 5 10 15

Leu Gln Gln Pro Glu Leu Glu Ser Asp Pro Glu Arg Thr Leu Ala Met
20 25 30

Asp Ser Ala Leu Ser Asp Pro His Asn Gly Ser Ala Glu Ala Gly Gly
35 40 45

Pro Thr Asn Ser Thr Thr Arg Pro Pro Ser Thr Pro Glu Gly Ile Ala
50 55 60

Leu Ala Tyr Gly Ser Leu Leu Leu
65 70

<210> 195
<211> 22
<212> PRT
<213> Homo sapiens

<400> 195
Val Ser Pro Pro Ala Ser Leu Leu Gln Gln Pro Glu Leu Glu Ser Asp
1 5 10 15

Pro Glu Arg Thr Leu Ala
20

<210> 196
<211> 21
<212> PRT
<213> Homo sapiens

<400> 196
Gly Ser Ala Glu Ala Gly Gly Pro Thr Asn Ser Thr Thr Arg Pro Pro
1 5 10 15

Ser Thr Pro Glu Gly
20

<210> 197
<211> 251
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 197
Ala Cys Leu Lys Met Cys Met Met Lys Met Val Xaa Pro Gln Ala Glu
1 5 10 15

Xaa Val Gly Cys Lys Ala Gly Val Glu Val Gly Val Gly Ile Leu Leu
20 25 30

Gln Ala Asp Val Lys Ala Gln Gln Gln Gly Asn Glu Asp Pro Trp Asn
35 40 45

Asp Asp Ile Ser Lys Ser Gln His Gly Lys Val Val Cys Phe Glu Ala
50 55 60

Phe Leu Gln Gln Ile Leu Gly Lys His Gln Phe Tyr Trp Cys Leu Glu
65 70 75 80

```
Gly Leu Gly His Cys His His His Ile Gly Ala Lys Tyr Pro Glu Asp
                85                  90                  95

Ile Val Asp Glu Glu Ser Ala Gln Gln Asp Ala Ala Ser Ala Asp Ile
            100                 105                 110

Val Glu Val Gln Glu Leu Tyr Ser Ile Lys Gly Glu Gly Gln Ala Lys
        115                 120                 125

Lys Val Val Gly Asn Pro Val Leu Pro Gln Gln Val Pro Asp Ala Asn
    130                 135                 140

Asp Ala Ala Gln Ala Gln Ala His Gln Val Leu Gly Val Lys Phe Ile
145                 150                 155                 160

Ile Asp Asp Leu Phe Leu Val Phe Pro Arg Thr Leu Cys Glu Glu Gln
                165                 170                 175

Leu Val Leu Ser Ile Trp Lys Ala Gly Trp Lys Lys Leu Ile His Glu
            180                 185                 190

Gly Ala Asp Gly Val Gly Gln Gly Gln Asp Ser Gln His Glu Glu Ile
        195                 200                 205

His Gly Gln Gln Glu Val Asp Val Leu Leu Gly Glu Tyr Phe Glu Lys
    210                 215                 220

Glu Val Glu Pro Gln Glu Cys Ala Ala Gly Asp Asp Gly Glu Ala Gly
225                 230                 235                 240

Gly Ile Pro Ala Gly Asp Cys Phe Arg His Val
                245                 250
```

<210> 198
<211> 28
<212> PRT
<213> Homo sapiens

<400> 198

```
Asp Asp Ile Ser Lys Ser Gln His Gly Lys Val Val Cys Phe Glu Ala
  1                 5                  10                  15

Phe Leu Gln Gln Ile Leu Gly Lys His Gln Phe Tyr
            20                  25
```

<210> 199
<211> 28
<212> PRT
<213> Homo sapiens

<400> 199

```
Gln Phe Tyr Trp Cys Leu Glu Gly Leu Gly His Cys His His His Ile
  1                 5                  10                  15

Gly Ala Lys Tyr Pro Glu Asp Ile Val Asp Glu Glu
```

20 25

<210> 200
<211> 26
<212> PRT
<213> Homo sapiens

<400> 200
Ser Ile Lys Gly Glu Gly Gln Ala Lys Lys Val Val Gly Asn Pro Val
1 5 10 15

Leu Pro Gln Gln Val Pro Asp Ala Asn Asp
20 25

<210> 201
<211> 26
<212> PRT
<213> Homo sapiens

<400> 201
Leu Leu Gly Glu Tyr Phe Glu Lys Glu Val Glu Pro Gln Glu Cys Ala
1 5 10 15

Ala Gly Asp Asp Gly Glu Ala Gly Gly Ile
20 25

<210> 202
<211> 22
<212> PRT
<213> Homo sapiens

<400> 202
Leu Arg Ser Val Val Gln Asp His Pro Gly Gln His Gly Glu Thr Pro
1 5 10 15

Ser Leu Leu Lys Ile Gln
20

<210> 203
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 203

```
Ile Xaa Xaa Gly Gln Lys Ile Ser Pro Tyr Phe Lys Met Gln Gln Ser
 1               5                  10                  15

Ile Asn Lys Ile Leu Ala Ile Phe Leu Asn Asp Thr Phe Phe Tyr Asn
            20                  25                  30

Leu Tyr Arg Lys Leu Ser Ala Arg Ala Arg His Arg Val Thr Pro Val
        35                  40                  45

Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser Pro Glu Val Ser
    50                  55                  60

Ser Ser Arg Pro Pro Trp Pro Thr Trp Arg Asn Ser Ile Ser Thr Lys
65                  70                  75                  80

Asn Thr Lys Gln Leu Ala Arg Cys Gly Gly Arg Arg Leu
                85                  90


<210> 204
<211> 24
<212> PRT
<213> Homo sapiens

<400> 204
Tyr Phe Lys Met Gln Gln Ser Ile Asn Lys Ile Leu Ala Ile Phe Leu
 1               5                  10                  15

Asn Asp Thr Phe Phe Tyr Asn Leu
            20


<210> 205
<211> 57
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 205
Met Phe Tyr Asn Phe Val Arg Gln Leu Asp Thr Val Ser Ile Glu His
 1               5                  10                  15

Ala Gly Lys Ser Lys Leu Lys Met Thr Val Gly Thr Lys Leu Thr Ser
            20                  25                  30

Gly Xaa Gly Pro Arg Lys Ser Ser Gln Ser Gly Arg Ile Ala Ala Ser
        35                  40                  45

Ile Thr Asp Cys Gln Gln Cys Lys Ala
    50                  55


<210> 206
<211> 46
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 206
Met Glu Ala Ala Ile Leu Pro Leu Trp Leu Leu Phe Leu Gly Pro Xaa
1 5 10 15

Pro Glu Val Ser Phe Val Pro Thr Val Ile Phe Asn Leu Asp Phe Pro
20 25 30

Ala Cys Ser Ile Leu Thr Val Ser Ser Cys Leu Thr Lys Leu
35 40 45

<210> 207
<211> 22
<212> PRT
<213> Homo sapiens

<400> 207
Leu Leu Phe Ile Leu Leu His Leu His Leu Lys Leu Val Leu Asn Cys
1 5 10 15

Ser Ala Asn Ser Leu Val
20

<210> 208
<211> 16
<212> PRT
<213> Homo sapiens

<400> 208
Asn Ser Ala Arg Ala Ala Arg Ala Thr Phe Ser Val Gln Ser Met Gly
1 5 10 15

<210> 209
<211> 11
<212> PRT
<213> Homo sapiens

<400> 209
Met Leu Glu Arg Asn Leu Pro Gln Gly Arg Ala
1 5 10

<210> 210
<211> 97
<212> PRT

<213> Homo sapiens

<400> 210
Ala Thr Glu Pro Gln Phe Leu Gly Arg Ala Ala Ala Val Ser Ala Glu
1 5 10 15

Gly Lys Ala Val Gln Thr Ala Ile Leu Gly Gly Ala Met Ser Val Val
20 25 30

Ser Ala Cys Val Leu Leu Thr Gln Cys Leu Arg Asp Leu Ala Gln Pro
35 40 45

Arg Arg Gly Ala Lys Met Ser Asp His Arg Glu Arg Leu Arg Asn Ser
50 55 60

Ala Cys Ala Val Ser Glu Gly Cys Thr Leu Leu Ser Gln Ala Leu Arg
65 70 75 80

Glu Arg Ser Ser Pro Arg Thr Leu Pro Pro Val Asn Ser Asn Ser Val
85 90 95

Asn

<210> 211
<211> 30
<212> PRT
<213> Homo sapiens

<400> 211
Leu Gly Gly Ala Met Ser Val Val Ser Ala Cys Val Leu Leu Thr Gln
1 5 10 15

Cys Leu Arg Asp Leu Ala Gln Pro Arg Arg Gly Ala Lys Met
20 25 30

<210> 212
<211> 25
<212> PRT
<213> Homo sapiens

<400> 212
Cys Ala Val Ser Glu Gly Cys Thr Leu Leu Ser Gln Ala Leu Arg Glu
1 5 10 15

Arg Ser Ser Pro Arg Thr Leu Pro Pro
20 25

<210> 213
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 213
Gln Phe Ser Thr Pro Lys Arg Thr Val Gly Ala Asn Arg Gln Ala Ile
1 5 10 15

Asn Ala Ala Leu Thr Gln Ala Thr Arg Thr Thr Val Tyr Ile Val Asp
20 25 30

Ile Gln Asp Ile Asp Ser Ala Ala Arg Ala Arg Pro His Ser Tyr Leu
35 40 45

Asp Ala Tyr Phe Val Phe Pro Asn Gly Ser Ala Leu Thr Xaa Asp Glu
50 55 60

Leu Ser Val
65

<210> 214
<211> 32
<212> PRT
<213> Homo sapiens

<400> 214
Leu Thr Gln Ala Thr Arg Thr Thr Val Tyr Ile Val Asp Ile Gln Asp
1 5 10 15

Ile Asp Ser Ala Ala Arg Ala Arg Pro His Ser Tyr Leu Asp Ala Tyr
20 25 30

<210> 215
<211> 25
<212> PRT
<213> Homo sapiens

<400> 215
Asn His Gly His Ser Cys Phe Leu Cys Glu Ile Val Ile Arg Ser Gln
1 5 10 15

Phe His Thr Thr Tyr Glu Pro Glu Ala
20 25

<210> 216
<211> 48
<212> PRT
<213> Homo sapiens

<400> 216
Ser Gly Arg His Arg Val Glu Leu Gln Leu Leu Phe Pro Leu Val Arg
1 5 10 15

```
Val Asn Phe Glu Leu Gly Val Asn His Gly His Ser Cys Phe Leu Cys
                20                  25                  30

Glu Ile Val Ile Arg Ser Gln Phe His Thr Thr Tyr Glu Pro Glu Ala
        35                  40                  45
```

<210> 217
<211> 13
<212> PRT
<213> Homo sapiens

<400> 217
Lys Phe Leu Asn Trp Ser Ile Ser Asp Ala Phe Val Lys
1   5   10

<210> 218
<211> 12
<212> PRT
<213> Homo sapiens

<400> 218
Ile Lys Ile Phe Ser Cys Cys Arg Lys Ala Trp Val
1   5   10

<210> 219
<211> 98
<212> PRT
<213> Homo sapiens

<400> 219

```
Phe Leu Ser Leu Leu Leu Leu Ala Phe Ser Phe Ser Leu Phe Phe Phe
  1               5                  10                  15

Phe Asn Arg Lys Cys Thr Met Gln Val His Arg Pro Gln Thr Lys Leu
            20                  25                  30

Asp His Gln His Val His Val Gln Thr Ser Ala Val Ala Cys Thr Ala
        35                  40                  45

Cys Ala Pro Gln Phe Leu Gln Cys Trp Phe Val Cys Phe Leu Ile Gln
    50                  55                  60

His Pro Ala Gly Phe Thr Phe Gln Ala Arg Ser Val Ala Thr Pro Lys
65                  70                  75                  80

Cys Val Leu Met Ser Ser Ser Leu Phe Ala Phe Leu Leu Thr Tyr Phe
                85                  90                  95

Val Tyr
```

<210> 220
<211> 23
<212> PRT
<213> Homo sapiens

<400> 220
Val Gln Thr Ser Ala Val Ala Cys Thr Ala Cys Ala Pro Gln Phe Leu
1 5 10 15

Gln Cys Trp Phe Val Cys Phe
20

<210> 221
<211> 19
<212> PRT
<213> Homo sapiens

<400> 221
Ser Val Ala Thr Pro Lys Cys Val Leu Met Ser Ser Ser Leu Phe Ala
1 5 10 15

Phe Leu Leu

<210> 222
<211> 33
<212> PRT
<213> Homo sapiens

<400> 222
Ser Gln His Pro Glu Leu Gln Glu Gly Lys Ile Ser Ser Gln Ile Glu
1 5 10 15

Phe Tyr Ile Tyr His Phe Phe Gly Thr Phe Ser Pro Gln Asp Ser Asn
20 25 30

Ile

<210> 223
<211> 141
<212> PRT
<213> Homo sapiens

<400> 223
Met Asn Ala Arg Gly Leu Gly Ser Glu Leu Lys Asp Ser Ile Pro Val
1 5 10 15

Thr Glu Leu Ser Ala Ser Gly Pro Phe Glu Ser His Asp Leu Leu Arg
20 25 30

Lys Gly Phe Ser Cys Val Lys Asn Glu Leu Leu Pro Ser His Pro Leu
35 40 45

Glu Leu Ser Glu Lys Asn Phe Gln Leu Asn Gln Asp Lys Met Asn Phe

```
     50                  55                  60

Ser Thr Leu Arg Asn Ile Gln Gly Leu Phe Ala Pro Leu Lys Leu Gln
 65                  70                  75                  80

Met Glu Phe Lys Ala Val Gln Gln Val Gln Arg Leu Pro Phe Leu Ser
                 85                  90                  95

Ser Ser Asn Leu Ser Leu Asp Val Leu Arg Gly Asn Asp Glu Thr Ile
            100                 105                 110

Gly Phe Glu Asp Ile Leu Asn Asp Pro Ser Gln Ser Glu Val Met Gly
        115                 120                 125

Glu Pro His Leu Met Val Glu Tyr Lys Leu Gly Leu Leu
    130                 135                 140


<210> 224
<211> 23
<212> PRT
<213> Homo sapiens

<400> 224
Leu Lys Asp Ser Ile Pro Val Thr Glu Leu Ser Ala Ser Gly Pro Phe
  1               5                  10                  15

Glu Ser His Asp Leu Leu Arg
            20


<210> 225
<211> 21
<212> PRT
<213> Homo sapiens

<400> 225
Gln Leu Asn Gln Asp Lys Met Asn Phe Ser Thr Leu Arg Asn Ile Gln
  1               5                  10                  15

Gly Leu Phe Ala Pro
            20


<210> 226
<211> 22
<212> PRT
<213> Homo sapiens

<400> 226
Gln Gln Val Gln Arg Leu Pro Phe Leu Ser Ser Ser Asn Leu Ser Leu
  1               5                  10                  15

Asp Val Leu Arg Gly Asn
            20


<210> 227
```

<211> 38
<212> PRT
<213> Homo sapiens

<400> 227
Glu Phe Gly Thr Arg Ala Ala Pro Gly Ser Leu Gly Ala Arg Gly Ser
1 5 10 15

Ala Ala Thr Pro Ser Gly Arg Pro Gln Lys Leu Arg Asp Pro Ser Gly
20 25 30

Thr Ser Gly Gln Pro Arg
35

<210> 228
<211> 73
<212> PRT
<213> Homo sapiens

<400> 228
Asn Ser Ala Arg Gly Arg His Gln Gly Ala Trp Ala Pro Gly Ala Pro
1 5 10 15

Pro Arg Pro His Arg Val Asp His Arg Ser Ser Gly Thr Leu Pro Ala
20 25 30

Pro Leu Asp Ser Pro Gly Cys Cys Trp Pro Pro Ser Ser Ser Ser Ser
35 40 45

Leu Glu Ala Leu Trp Pro Ile Gln Thr Gly Leu Phe Phe Gln Ile Met
50 55 60

Leu Val Arg Thr Pro Gln Gln Cys Ser
65 70

<210> 229
<211> 25
<212> PRT
<213> Homo sapiens

<400> 229
Gln Gly Ala Trp Ala Pro Gly Ala Pro Pro Arg Pro His Arg Val Asp
1 5 10 15

His Arg Ser Ser Gly Thr Leu Pro Ala
20 25

<210> 230
<211> 19
<212> PRT
<213> Homo sapiens

<400> 230
Leu Trp Pro Ile Gln Thr Gly Leu Phe Phe Gln Ile Met Leu Val Arg
1 5 10 15

Thr Pro Gln

<210> 231
<211> 35
<212> PRT
<213> Homo sapiens

<400> 231
Thr Met Ser Glu Leu Leu Gly Arg Asn Leu Gly Trp Glu Ala Ser Asp
1 5 10 15

Pro Arg Leu His Pro Trp Leu Pro Gln Pro Ala Ala Ala Ser Lys Thr
20 25 30

Lys Arg Glu
35

<210> 232
<211> 17
<212> PRT
<213> Homo sapiens

<400> 232
Ile Phe Arg Asn Ala His Ile Ile Val Gly Thr Asp Ser Phe Leu His
1 5 10 15

Asp

<210> 233
<211> 15
<212> PRT
<213> Homo sapiens

<400> 233
Gly Gly Asn Lys Tyr Gln Thr Ile Asp Asn Tyr Gln Pro Tyr Pro
1 5 10 15

<210> 234
<211> 20
<212> PRT
<213> Homo sapiens

<400> 234
Pro Leu Leu Gly Val Ser Ala Thr Leu Asn Ser Val Leu Asn Ser Asn
1 5 10 15

Ala Ile Lys Asn
20

<210> 235

<211> 14
<212> PRT
<213> Homo sapiens

<400> 235
Gly Ser Ala Val Ser Ala Ala Pro Gly Ile Leu Tyr Pro Gly
1 5 10

<210> 236
<211> 280
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 236
Arg Ser Phe Ser Leu Ser Phe Ser Leu Leu Ser Pro Ser Glu Met Met
1 5 10 15

Ala Leu Gly Ala Ala Gly Ala Thr Arg Val Phe Val Ala Met Val Ala
20 25 30

Ala Ala Leu Gly Gly His Pro Leu Leu Gly Val Ser Ala Thr Leu Asn
35 40 45

Ser Val Leu Asn Ser Asn Ala Ile Lys Asn Leu Pro Pro Pro Leu Gly
50 55 60

Gly Ala Ala Gly His Pro Gly Ser Ala Val Ser Ala Ala Pro Gly Ile
65 70 75 80

Leu Tyr Pro Gly Gly Asn Lys Tyr Gln Thr Ile Asp Asn Tyr Gln Pro
85 90 95

Tyr Pro Cys Ala Glu Asp Glu Glu Cys Gly Thr Asp Glu Tyr Cys Ala
100 105 110

Ser Pro Thr Arg Gly Gly Asp Ala Gly Val Gln Ile Cys Leu Ala Cys
115 120 125

Arg Lys Arg Arg Lys Arg Cys Met Xaa Xaa Ala Met Cys Cys Pro Gly
130 135 140

Asn Tyr Cys Lys Asn Gly Ile Cys Val Ser Ser Asp Gln Asn His Phe
145 150 155 160

Arg Gly Glu Ile Glu Glu Thr Ile Thr Glu Ser Phe Gly Asn Asp His
165 170 175

```
Ser Thr Leu Asp Gly Tyr Ser Arg Arg Thr Thr Leu Ser Ser Lys Met
            180                 185                 190

Tyr His Thr Lys Gly Gln Glu Gly Ser Val Cys Leu Arg Ser Ser Asp
        195                 200                 205

Cys Ala Ser Gly Leu Cys Cys Ala Arg His Phe Trp Ser Lys Ile Cys
    210                 215                 220

Lys Pro Val Leu Lys Glu Gly Gln Val Cys Thr Lys His Arg Arg Lys
225                 230                 235                 240

Gly Ser His Gly Leu Glu Ile Phe Gln Arg Cys Tyr Cys Gly Glu Gly
                245                 250                 255

Leu Ser Cys Arg Ile Gln Lys Asp His His Gln Ala Ser Asn Ser Ser
            260                 265                 270

Arg Leu His Thr Cys Gln Arg His
        275                 280
```

<210> 237
<211> 8
<212> PRT
<213> Homo sapiens

<400> 237
Ser Ala Thr Leu Asn Ser Val Leu
1 5

<210> 238
<211> 7
<212> PRT
<213> Homo sapiens

<400> 238
Asn Ser Asn Ala Ile Lys Asn
1 5

<210> 239
<211> 7
<212> PRT
<213> Homo sapiens

<400> 239
Gly Gly Asn Lys Tyr Gln Thr
1 5

<210> 240
<211> 15
<212> PRT
<213> Homo sapiens

<400> 240

Asp Asn Tyr Gln Pro Tyr Pro Cys Ala Glu Asp Glu Glu Cys Gly
1 5 10 15

<210> 241
<211> 6
<212> PRT
<213> Homo sapiens

<400> 241
Gly Val Gln Ile Cys Leu
1 5

<210> 242
<211> 10
<212> PRT
<213> Homo sapiens

<400> 242
Pro Gly Asn Tyr Cys Lys Asn Gly Ile Cys
1 5 10

<210> 243
<211> 6
<212> PRT
<213> Homo sapiens

<400> 243
Arg Gly Glu Ile Glu Glu
1 5

<210> 244
<211> 18
<212> PRT
<213> Homo sapiens

<400> 244
Tyr His Thr Lys Gly Gln Glu Gly Ser Val Cys Leu Arg Ser Ser Asp
1 5 10 15

Cys Ala

<210> 245
<211> 26
<212> PRT
<213> Homo sapiens

<400> 245
Gly Leu Cys Cys Ala Arg His Phe Trp Ser Lys Ile Cys Lys Pro Val
1 5 10 15

Leu Lys Glu Gly Gln Val Cys Thr Lys His
20 25

<210> 246
<211> 10
<212> PRT
<213> Homo sapiens

<400> 246
Arg Lys Gly Ser His Gly Leu Glu Ile Phe
1 5 10

<210> 247
<211> 9
<212> PRT
<213> Homo sapiens

<400> 247
Gln Arg Cys Tyr Cys Gly Glu Gly Leu
1 5

<210> 248
<211> 22
<212> PRT
<213> Homo sapiens

<400> 248
Cys Arg Ile Gln Lys Asp His His Gln Ala Ser Asn Ser Ser Arg Leu
1 5 10 15

His Thr Cys Gln Arg His
20

<210> 249
<211> 38
<212> PRT
<213> Homo sapiens

<400> 249
Glu Gly Leu Cys Glu Gly Ala Val Gly Trp Asn Gly Gly Trp His Gly
1 5 10 15

Thr Gly Thr Arg Glu Ala Ser Ser Pro Phe Ser Ala Thr Ser Lys Arg
20 25 30

His Ser Ala Leu Pro Glu
35

<210> 250
<211> 76
<212> PRT
<213> Homo sapiens

<400> 250
Ser Trp Ser Leu Met Phe Ile Leu Lys Leu Ala Ser Leu Phe Arg Leu

```
  1               5                  10                  15

Leu Ile Gln Pro Leu Ala Phe Ser Phe Asn Leu Gly Gln Lys Asn Arg
            20                  25                  30

Gln His Phe Leu Pro Pro Leu Pro His His His Pro Ile Tyr Ser Phe
        35                  40                  45

Ser Leu Tyr Tyr His Asn Ser Pro Lys Arg Pro Lys Ser Ile Ile Lys
    50                  55                  60

Ser Asn Asn Leu Ala Ser Asn Leu Asn Pro Ser Ile
 65                  70                  75
```

<210> 251
<211> 21
<212> PRT
<213> Homo sapiens

<400> 251

```
Lys Leu Ala Ser Leu Phe Arg Leu Leu Ile Gln Pro Leu Ala Phe Ser
  1               5                  10                  15

Phe Asn Leu Gly Gln
            20
```

<210> 252
<211> 20
<212> PRT
<213> Homo sapiens

<400> 252

```
Ser Phe Ser Leu Tyr Tyr His Asn Ser Pro Lys Arg Pro Lys Ser Ile
  1               5                  10                  15

Ile Lys Ser Asn
            20
```

<210> 253
<211> 18
<212> PRT
<213> Homo sapiens

<400> 253

```
Lys Pro Pro Pro Pro Thr Pro Pro Phe Ala Tyr Thr Thr Pro Leu Leu
  1               5                  10                  15

Leu Ser
```

<210> 254
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 254
Met Leu Ala Cys Arg Arg Leu Pro Met Ser Gln Asn Pro Leu Ser Met
1 5 10 15

Leu Thr Leu Asp Thr Pro Leu Lys Pro Leu Ile Val Cys Ala Ser Gly
20 25 30

Cys Glu Val Pro Ala Pro Cys Gly Xaa Cys Ala Cys Thr Xaa Pro Ala
35 40 45

Leu Gln Phe Leu Cys Thr Tyr Ser Ser Ser Ala Val Leu Lys Cys
50 55 60

<210> 255
<211> 30
<212> PRT
<213> Homo sapiens

<400> 255
Leu Pro Met Ser Gln Asn Pro Leu Ser Met Leu Thr Leu Asp Thr Pro
1 5 10 15

Leu Lys Pro Leu Ile Val Cys Ala Ser Gly Cys Glu Val Pro
20 25 30

<210> 256
<211> 13
<212> PRT
<213> Homo sapiens

<400> 256
Ala Phe Gly Asp Thr Asp Ile Arg Gln Leu Phe Phe Ala
1 5 10

<210> 257
<211> 45
<212> PRT
<213> Homo sapiens

<400> 257
Arg Gly Ile Ser Val Leu Arg Arg Val Trp Gly Gln Pro Trp Arg Leu
1 5 10 15

Gln Val Phe Ser Leu Pro Gln Gln Ser Pro Ala Gly Ala Pro Thr Gly

```
            20                  25                  30

Ser Gln Arg Gly Met Ala Ala Thr Asp Phe Val Gln Glu
        35                  40                  45


<210> 258
<211> 23
<212> PRT
<213> Homo sapiens

<400> 258
Pro Glu Glu Ala Ser Phe Ala Cys Glu Gly Cys Gly Pro Pro Leu Pro
  1               5                  10                  15

Trp Ala Cys Ser Pro Gly Trp
            20


<210> 259
<211> 108
<212> PRT
<213> Homo sapiens

<400> 259
Lys Tyr Met Leu Tyr Arg Pro Gln Ala Ala Leu Asp Leu Val Ser Asp
  1               5                  10                  15

Thr Ser Asp Gln Lys Lys Pro Val Leu Arg Val Arg Gly Val Gly Pro
            20                  25                  30

Arg Cys Leu Gly Pro Ala His Arg Gly Gly Trp Thr Pro Ala Gly Ser
        35                  40                  45

Gln Pro Ala Val Thr Ser Gly Leu Leu Ala Ser Ser Ala Ser Gly Leu
     50                  55                  60

Leu Gly Ser Pro Ala Leu Cys Pro Ser Val Thr Ser Leu Ser Gly Cys
 65                  70                  75                  80

Pro Val Leu Ala Ala Leu Ser Phe Val Arg Ile Thr Pro Ser Phe Phe
                85                  90                  95

Phe Ser Pro Asn Thr Ser Ser Pro Ile Ile Leu Arg
            100                 105


<210> 260
<211> 28
<212> PRT
<213> Homo sapiens

<400> 260
Asp Gln Lys Lys Pro Val Leu Arg Val Arg Gly Val Gly Pro Arg Cys
  1               5                  10                  15

Leu Gly Pro Ala His Arg Gly Gly Trp Thr Pro Ala
            20                  25
```

<210> 261
<211> 28
<212> PRT
<213> Homo sapiens

<400> 261
Gln Pro Ala Val Thr Ser Gly Leu Leu Ala Ser Ser Ala Ser Gly Leu
1 5 10 15

Leu Gly Ser Pro Ala Leu Cys Pro Ser Val Thr Ser
20 25

<210> 262
<211> 151
<212> PRT
<213> Homo sapiens

<400> 262
Gln Arg Ile Ile Thr Val Ser Met Glu Asp Val Lys Ile Leu Leu Thr
1 5 10 15

Gln Glu Asn Pro Phe Phe Arg Lys Leu Ser Ser Glu Thr Tyr Ser Gln
20 25 30

Ala Lys Asp Leu Ala Lys Gly Ser Ile Val Leu Lys Tyr Glu Pro Asp
35 40 45

Ser Ala Asn Pro Asp Ala Leu Gln Cys Pro Ile Val Leu Cys Gly Trp
50 55 60

Arg Gly Lys Ala Ser Ile Arg Thr Phe Val Pro Lys Asn Glu Arg Leu
65 70 75 80

His Tyr Leu Arg Met Met Gly Leu Glu Val Leu Gly Glu Lys Lys Lys
85 90 95

Glu Gly Val Ile Leu Thr Asn Glu Ser Ala Ala Ser Thr Gly Gln Pro
100 105 110

Asp Asn Asp Val Thr Glu Gly Gln Arg Ala Gly Glu Pro Asn Ser Pro
115 120 125

Asp Ala Glu Glu Ala Asn Ser Pro Asp Val Thr Ala Gly Cys Asp Pro
130 135 140

Ala Gly Val His Pro Pro Arg
145 150

<210> 263
<211> 25
<212> PRT
<213> Homo sapiens

<400> 263

```
Asp Val Lys Ile Leu Leu Thr Gln Glu Asn Pro Phe Phe Arg Lys Leu
  1               5                  10                  15

Ser Ser Glu Thr Tyr Ser Gln Ala Lys
             20                  25


<210> 264
<211> 28
<212> PRT
<213> Homo sapiens

<400> 264
Ala Lys Gly Ser Ile Val Leu Lys Tyr Glu Pro Asp Ser Ala Asn Pro
  1               5                  10                  15

Asp Ala Leu Gln Cys Pro Ile Val Leu Cys Gly Trp
             20                  25


<210> 265
<211> 28
<212> PRT
<213> Homo sapiens

<400> 265
Leu His Tyr Leu Arg Met Met Gly Leu Glu Val Leu Gly Glu Lys Lys
  1               5                  10                  15

Lys Glu Gly Val Ile Leu Thr Asn Glu Ser Ala Ala
             20                  25


<210> 266
<211> 25
<212> PRT
<213> Homo sapiens

<400> 266
Ala Gly Glu Pro Asn Ser Pro Asp Ala Glu Glu Ala Asn Ser Pro Asp
  1               5                  10                  15

Val Thr Ala Gly Cys Asp Pro Ala Gly
             20                  25


<210> 267
<211> 14
<212> PRT
<213> Homo sapiens

<400> 267
Ile Leu Phe Ala Ala Ser Lys Gly Asp Asp Phe Gln Ala Asp
  1               5                  10


<210> 268
<211> 14
```

<212> PRT
<213> Homo sapiens

<400> 268
Ile Leu Phe Ala Ala Ser Lys Gly Asp Asp Phe Gln Ala Asp
1 5 10

<210> 269
<211> 18
<212> PRT
<213> Homo sapiens

<400> 269
Leu Tyr Ala Gln Lys Leu Gly Ala Thr Cys Phe Cys Thr Asp Cys Arg
1 5 10 15

Ser Lys

<210> 270
<211> 81
<212> PRT
<213> Homo sapiens

<400> 270
Ala Gly Ile Gln His Glu Leu Ala Cys Asp Asn Pro Gly Leu Pro Glu
1 5 10 15

Asn Gly Tyr Gln Ile Leu Tyr Lys Arg Leu Tyr Leu Pro Gly Glu Ser
20 25 30

Leu Thr Phe Met Cys Tyr Glu Gly Phe Glu Leu Met Gly Glu Val Thr
35 40 45

Ile Arg Cys Ile Leu Gly Gln Pro Ser His Trp Asn Gly Pro Leu Pro
50 55 60

Val Cys Lys Val Ala Glu Ala Ala Ala Glu Thr Ser Leu Glu Gly Gly
65 70 75 80

Asn

<210> 271
<211> 27
<212> PRT
<213> Homo sapiens

<400> 271
Gln Pro Ser His Trp Asn Gly Pro Leu Pro Val Cys Lys Val Ala Glu
1 5 10 15

Ala Ala Ala Glu Thr Ser Leu Glu Gly Gly Asn
20 25

<210> 272
<211> 13
<212> PRT
<213> Homo sapiens

<400> 272
Tyr Glu Thr Gly Glu Thr Arg Glu Tyr Glu Val Ser Ile
1 5 10

<210> 273
<211> 26
<212> PRT
<213> Homo sapiens

<400> 273
Trp Val Glu Lys Gly Glu Arg Gly Val Gly Pro Asp Thr Lys Glu Met
1 5 10 15

Phe Ser Ala Ile Asn Gln Leu Gln Asn Lys
20 25

<210> 274
<211> 16
<212> PRT
<213> Homo sapiens

<400> 274
Gly Thr Ser Pro Lys Cys Trp Asp Tyr Arg Glu Leu Met Lys Val Glu
1 5 10 15

<210> 275
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 275
His Glu Pro Lys Val Leu Gly Leu Gln Gly Val Asp Glu Ser Gly Asp
1 5 10 15

Val Phe Arg Ala Thr Tyr Ala Ala Phe Arg Cys Ser Pro Ile Ser Gly
20 25 30

Leu Leu Glu Ser His Gly Ile Gln Lys Val Ser Ile Thr Phe Xaa Pro
35 40 45

Arg Gly Arg Gly

50

<210> 276
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 276
Asp Tyr Xaa Gln Phe Trp Asp Val Glu Cys His Pro Leu Lys Glu Pro
1 5 10 15

His Met Lys His Thr Leu Arg Phe Gln Leu Ser Gly Gln Ser Ile Glu
20 25 30

Ala Glu Asn Glu Pro Glu Asn Ala Cys Leu Ser Thr Asp Ser Leu Ile
35 40 45

Lys Ile Asp
50

<210> 277
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 277
His Leu Val Lys Pro Arg Arg Gln Ala Val Ser Glu Ala Ser Ala Arg
1 5 10 15

Ile Pro Asp Xaa Gln Leu Asp Val Thr Ala Arg Gly Val Tyr Ala Pro
20 25 30

Glu Asp Val Tyr Arg Phe Leu Pro Thr Ser Val Gly Glu Ser Arg Thr
35 40 45

Leu Lys Val
50

<210> 278
<211> 34
<212> PRT
<213> Homo sapiens

<400> 278
Asn Leu Arg Asn Asn Ser Phe Ile Thr His Ser Leu Lys Phe Leu Ser

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  1               5                  10                  15

Pro Arg Glu Pro Phe Tyr Val Lys His Ser Lys Tyr Ser Leu Arg Ala
            20                  25                  30

Gln His
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<210> 279
<211> 47
<212> PRT
<213> Homo sapiens

<400> 279
Glu Asn Leu Ser Thr Ser Cys Val Ser Cys Gln Val Val Phe Val Thr
  1   5   10   15

Ser Glu Pro Ala Leu Thr Leu Pro Thr Tyr His Val Met Leu Ile Ser
            20   25   30

Pro Thr Val Pro Cys Cys Ile Gly Ser Ala Leu Arg Ala Glu Ile
        35   40   45

<210> 280
<211> 195
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 280
Asp Asp Asp Gly Leu Pro Phe Pro Thr Asp Val Ile Gln His Arg Leu
  1   5   10   15

Arg Gln Ile Glu Ala Gly Tyr Lys Gln Glu Val Glu Gln Leu Arg Arg
            20   25   30

Gln Val Arg Asp Ser Asp Glu Xaa Gly His Pro Ser Leu Leu Cys Pro
        35   40   45

Ser Ser Arg Ala Pro Met Asp Tyr Glu Asp Asp Phe Thr Cys Leu Lys
    50   55   60

Glu Ser Asp Gly Ser Asp Thr Glu Asp Phe Gly Ser Asp His Ser Glu
65   70   75   80

Asp Cys Leu Ser Glu Ala Ser Trp Glu Pro Val Asp Lys Lys Glu Thr
                85   90   95

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Glu Val Thr Arg Trp Val Pro Asp His Met Ala Ser His Cys Tyr Asn
            100                 105                 110

Cys Asp Cys Glu Phe Trp Leu Ala Lys Arg Arg His His Cys Arg Asn
        115                 120                 125

Cys Gly Asn Val Phe Cys Ala Gly Cys Cys His Leu Lys Leu Pro Ile
    130                 135                 140

Pro Asp Gln Gln Leu Tyr Asp Pro Val Leu Val Cys Asn Ser Cys Tyr
145                 150                 155                 160

Xaa Thr His Ser Ser Leu Ser Cys Gln Gly Thr His Glu Pro Thr Ala
                165                 170                 175

Glu Glu Thr His Cys Tyr Ser Phe Gln Leu Asn Ala Gly Glu Lys Pro
            180                 185                 190

Val Gln Phe
        195


<210> 281
<211> 28
<212> PRT
<213> Homo sapiens

<400> 281
Ser Glu Ala Ser Trp Glu Pro Val Asp Lys Lys Glu Thr Glu Val Thr
  1               5                  10                  15

Arg Trp Val Pro Asp His Met Ala Ser His Cys Tyr
             20                  25


<210> 282
<211> 10
<212> PRT
<213> Homo sapiens

<400> 282
His His Cys Arg Asn Cys Gly Asn Val Phe
  1               5                  10


<210> 283
<211> 14
<212> PRT
<213> Homo sapiens

<400> 283
Arg Leu Arg Gln Ile Glu Ala Gly Tyr Lys Gln Glu Val Glu
  1               5                  10


<210> 284
<211> 40
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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 284
Val Asn Lys Ser Asn Gly Arg Xaa His Gly Arg Arg Ala Tyr Arg Xaa
1 5 10 15

Ser Leu Ser Ile Ala Phe Pro Arg Lys Pro Gln Phe Arg His Arg Ser
20 25 30

Pro Glu Val Ser Pro Ser Asp Leu
35 40

<210> 285
<211> 39
<212> PRT
<213> Homo sapiens

<400> 285
Ser Pro Ile Pro Ser Glu Glu Val Lys Glu Ile Pro His Arg Tyr Arg
1 5 10 15

Gly Ser Arg Cys Pro Arg Thr Ser Asn Ser Arg Phe Gly Pro Arg Arg
20 25 30

Leu Ala Pro Thr Ser Thr Thr
35

<210> 286
<211> 39
<212> PRT
<213> Homo sapiens

<400> 286
Ser Pro Ile Pro Ser Glu Glu Val Lys Glu Ile Pro His Arg Tyr Arg
1 5 10 15

Gly Ser Arg Cys Pro Arg Thr Ser Asn Ser Arg Phe Gly Pro Arg Arg
20 25 30

Leu Ala Pro Thr Ser Thr Thr
35

<210> 287
<211> 14

<212> PRT
<213> Homo sapiens

<400> 287
Trp Gln Glu Ala Glu Met Asp Met Ala Trp Gln Lys Ser Ile
1 5 10

<210> 288
<211> 20
<212> PRT
<213> Homo sapiens

<400> 288
Met Ala Ser Ser Asp Glu His Ser Ser Ile Leu Gln Gly Leu Leu Ser
1 5 10 15

His His Ser Leu
20

<210> 289
<211> 44
<212> PRT
<213> Homo sapiens

<400> 289
Lys Arg Gln Pro Thr Ser Ala Met Lys Asp Pro Ser Arg Ser Ser Thr
1 5 10 15

Ser Pro Ser Ile Ile Asn Glu Asp Val Ile Ile Asn Gly His Ser His
20 25 30

Glu Asp Asp Asn Pro Phe Ala Glu Tyr Met Trp Met
35 40

<210> 290
<211> 45
<212> PRT
<213> Homo sapiens

<400> 290
Glu Asn Glu Glu Glu Phe Asn Arg Gln Ile Glu Glu Glu Leu Trp Glu
1 5 10 15

Glu Glu Phe Ile Glu Arg Cys Phe Gln Glu Met Leu Glu Glu Glu Glu
20 25 30

Glu His Glu Trp Phe Ile Pro Ala Arg Asp Leu Pro Gln
35 40 45

<210> 291
<211> 45
<212> PRT
<213> Homo sapiens

<400> 291
Thr Met Asp Gln Ile Gln Asp Gln Phe Asn Asp Leu Val Ile Ser Asp
1 5 10 15

Gly Ser Ser Leu Glu Asp Leu Val Val Lys Ser Asn Leu Asn Pro Asn
20 25 30

Ala Lys Glu Phe Val Pro Gly Val Lys Tyr Gly Asn Ile
35 40 45

<210> 292
<211> 87
<212> PRT
<213> Homo sapiens

<400> 292
Met Ser His Cys Ala Arg Pro Leu Phe Phe Glu Thr Phe Phe Ile Leu
1 5 10 15

Leu Ser Pro Arg Leu Lys Cys Ser Gly Thr Asn Thr Val His Tyr Ser
20 25 30

Leu Asp Leu Leu Gly Ser Ser Asn Ser Ala Ser Val Pro Gln Val Gly
35 40 45

Gly Leu Thr Asn Ala Gln His Asp Thr Trp Leu Ile Phe Val Phe Cys
50 55 60

Val Cys Val Cys Glu Pro Leu Arg Arg Pro Trp Ala Ala Phe Leu Ile
65 70 75 80

Ser Val Thr Ser Ser Ile Lys
85

<210> 293
<211> 30
<212> PRT
<213> Homo sapiens

<400> 293
Val Pro Gln Val Gly Gly Leu Thr Asn Ala Gln His Asp Thr Trp Leu
1 5 10 15

Ile Phe Val Phe Cys Val Cys Val Cys Glu Pro Leu Arg Arg
20 25 30

<210> 294
<211> 16
<212> PRT
<213> Homo sapiens

<400> 294
Pro Arg Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Arg Ile Thr Gly
1 5 10 15